

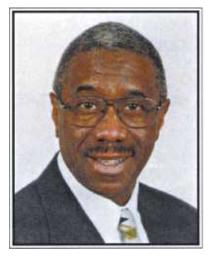
**DENVER WATER** 



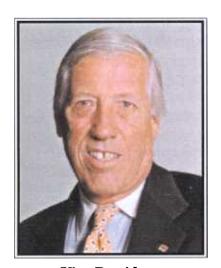
# Denver Board of Water Commissioners



President
William R. Roberts
Marketing Director
of
Empire Construction Services



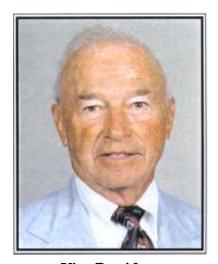
1st Vice President
Daniel E. Muse
Attorney



Vice President Richard A. Kirk Richard A. Kirk, Investments



Denise S. Maes
Attorney
Ballard, Spahr, Andrews, & Ingersoll



Vice President
Joe Shoemaker
Of Counsel, Shoemaker,
Wham, Krisor, & Shoemaker
Manager, Meridian Golf Club
Chrmn., Platte River Greenway Foundation
Chrmn., Foundation for Colorado State Parks

## MANAGER AND STAFF

Hamlet J. "Chips" Barry, Manager
Charles G. Jordan, Director of Public Affairs
Jon L. Diebel, Director of Engineering
Edward E. Pokorney, Director of Planning
Patricia Wells, General Counsel
David B. LaFrance, Director of Finance
Stephen W. Work, Director of Operations/Maintenance

#### **QUESTIONS?**

#### Who to Contact:

#### MANAGER AND STAFF:

H. J. "Chips" Barry, Manager 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6500

Charles G. Jordan, Director of Public Affairs 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6504

Patricia L. Wells, Director of Legal 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6460

David B. LaFrance, Director of Finance 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6411

Jon L. Diebel, Director of Engineering 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6611

Edward E. Pokorney, Director of Planning 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6506

Steve W. Work, Director of Operation & Maintenance 1600 W. 12th Avenue Denver, CO. 80204-3412 (303) 628-6503

# DENVER BOARD OF WATER COMMISSIONERS:

William R. Roberts, President Empire Construction Marketing Director 4095 Jackson Street Denver, CO. 80205 (303) 399-1002

Daniel E. Muse, First Vice-President\*\* 302 South Kearney St. Denver, CO. 80224 (303) 321-0907

Richard A. Kirk, Vice-President\*\* Richard A. Kirk, Investments 303 East 17<sup>th</sup> Street, Suite 700 Denver. CO. 80203 (303) 863-0729

Denise S. Maes, Vice-President Ballard, Spahr Andrews & Ingersoll 1225 17th St., #2300 Denver, CO. 80202-5523 (303) 299-7387

William J. Shoemaker, Vice-President\*\* Shoemaker, Wham & Krisor 1666 South University Blvd. Denver, CO. 80210 (303) 777-5501

### Questions concerning the 2001 Budget Document - Contact:

Ronald M. Duncan, Manager, Fiscal Planning & Performance 1600 W. 12th Avenue Denver, CO. 80204-3412

Ph: (303) 628-6412 Fax: (303) 628-6483

ron.duncan@denverwater.org

\*\*Budget Committee

### **Table of Contents**

Introduction	
Manager's Message	
Mission, Values and Goals of Denver Water	1
Integrated Resource Plan	3 9 11
Financial Policies	ç
Budgeting Process	
GFOA Budget Presentation Award	13
Budget Development Schedule	15
How to Read the 2001 Budget	17
Section 1 Summary	
2001 Budget Summary Descriptions	19
The Budget At A Glance	21
Summary of Projected Receipts and Expenditures, 2000-2001	23
2001 Crosswalk of Budgeted Receipts to Related Capital and Operating	
Expenditures by TOE	24
2001 Receipts and Expenditures Budget Graphs	25
2001 Program Budget Graphs	27
Customer Served per Regular Employee Graph	29
Denver Water - Condensed History	31
Service Area, Population and Demand	33 39
Denver Water Collection System Map Statistical Summary 1994-1999	41
Customer Service Data 1994-1999	42
Customer Service Data 1994-1999	72
Section 2 Receipts Forecast - Summary	
Explanation of Receipt Sources	43
Comparison of Receipts, 1997-2001	46
Comparison of Operating and Non-Operating Receipts, 1997-2001	47
2001 Billed Operating Revenue and Customers Graphs	49
Water Rates	51
System Development Charges and Participation	56
Section 3 Expenditure Budget by Program - Summary	
Overview	59
Program Expenditures Summary, 1997-2001	65
Raw Water Summary Description	66
Raw Water Expenditures, 1997-2001	67
Successive Use Summary Description	68
Successive Use Expenditures, 1997-2001	69
Water Treatment Summary Description	70
Water Treatment Expenditures, 1997-2001	71
Delivery Summary Description	72
Delivery Expenditures, 1997-2001	73
General Plant Summary Description	74
General Plant Expenditures, 1997-2001	75 76
Supporting Activities Summary Description and Expenditures, 2001	76

77
80
81
82
84
85
86
87
88
89 90
91
92
94
99
100
101
103
105
107
109
111
113
113
114

This Document is printed on Recycled Paper



February 1, 2001

Board of Water Commissioners City and County of Denver Denver, Colorado 80204-3412

Re: Denver Water 2001 Budget

Chips Barry, Manager

#### To Our Customers and Other Interested Readers:

On December 19, 2000, the Board of Water Commissioners adopted Denver Water's 2001 Budget. This budget reflects Denver Water's two principal commitments to its customers: To provide an adequate and reliable supply of high quality water and to develop additional supplies for the future.

Upgrading treatment plants and building a reuse plant to provide nonpotable water for industrial use and outdoor irrigation will take up much of Denver Water's attention and resources over the next few years. The work on the treatment plants began in 2000 and the ground breaking for the reuse plant will be in April 2001.

#### Water Treatment:

To comply with higher standards for water treatment set by the Environmental Protection Agency, Denver Water has begun extensive upgrades to each of its three treatment plants. During 2000, the agency spent \$14.7 million on related plant improvements and will spend another \$24.0 million in 2001. The two years combined represent a substantial portion of the \$89.6 million the Department is scheduled to spend in its 2001-2010 capital plan for treatment plant improvements.

#### Reuse Plant:

The reuse plant will take treated effluent from Metro Wastewater and will treat it again to a quality suitable for industrial and irrigation use. Denver Water spent \$1.9 million on pre-design of the plant and system in 2000 and will spend \$19.8 million in 2001 as construction begins. The project is being built in three phases with the first water being delivered in 2003. Ultimately, the reuse system will provide 17,000 acre-feet of nonpotable water.

### 2000 and 2001 Objectives

The 2000 and 2001 objectives are driven by the Strategic and Integrated Resource Plans. Below is a summary of supporting activities necessary to implement those plans.

#### Additional Storage:

To meet the IRP goal of adding 100,000 acre feet of firm annual yield to its system by 2045, Denver Water will undertake a number of projects in addition to the reuse plant.

In 1998, in cooperation with South Adams County Water and Sanitation District, Denver Water began an aggressive program of acquiring gravel pits. The gravel pits will be used to capture Denver Water's reusable return flows, to enhance river flows, to capture new yield, and to serve the reuse plant. Six gravel pits have been acquired since 1998. It is expected that these acquisitions will add between 17,500 and 19,500 acre-feet of storage at a cost of \$25.1 million, of which \$15.1 million was expended in 2000.

Portions of the property needed for the future construction of the Leyden Gulch Reservoir in Jefferson County were purchased in 1999 and 2000 with an additional purchase budgeted for 2001. The City of Arvada, Jefferson County Open Space and Denver Water have participated in the purchase of this property.

The 2001 budget also includes funds for the purchase of capacity in the Fortune Reservoir. It is anticipated that additional capacity will be purchased in 2002 and 2003. The Leyden Gulch Reservoir and Fortune Reservoir projects are part of the Northwest Tier Cooperative Project, identified in the Integrated Resource Plan.

Another source of future water supply is conserving the water we have. Commercial/Industrial conservation incentive programs had 7 contracts in force at the end of 2000 and 2,157 water audits were completed for low income housing units, multi-family, residential, commercial/industrial and governmental entities. These incentive programs will continue in 2001.

#### Meter Replacements and Improvements:

Denver Water began a meter replacement program in 1998 focusing on large size water meters. These meters often tend to register consumption inaccurately. The replacement of the meters will improve our ability to account for water use and to produce accurate water bills. Year 2000 actual expenditures totaled \$442,000 for replacement of 390 large meters. The 2001 budget includes \$581,000 for replacement of an additional 431 meters.

In January 2001 Denver Water selected a vendor for the conversion of our water meter reading system to automated meter reading. This program is expected to reduce labor costs significantly in the future. The retrofitting will begin March 1, 2001 with an estimated completion of 250,000 meter conversions by June 2005. The 2001 capital budget includes \$8.9 million for this work.

#### System Improvements:

In May 1997, a major break occurred on Conduit 94. In 1998 and 1999 we conducted sophisticated tests on the pipeline to identify additional faulty sections. Based on an analysis of the integrity of Conduit 94, \$1.5 million has been budgeted for 2001 to replace the pipeline from 56<sup>th</sup> Avenue and Huron to I-25. In 1998 a major break occurred on Conduit 55 in South Monaco Parkway. One third of Conduit 55's three-mile length was replaced during 1999. The remainder of the pipeline was replaced in 2000 for a total cost of \$5.4 million.

Finally, in order to allow orderly development of water infrastructure at the old Stapleton Airport, where a combination of private housing and commercial facilities will be developed over the next several years, Denver Water executed transfer and bill of sale agreements with the Stapleton Development Corporation during 2000.

#### 2000 Budget Performance

#### Receipts:

In 2000, receipts from the sale of water were \$151.5 million, \$18.2 million (13.6%) more than the budget due to warmer than anticipated weather and higher levels of consumption. In 2000, System Development Charge receipts of \$25.6 million were \$6.5 million more than budgeted primarily due to an unbudgeted receipt of \$2.3 million from the City of Westminster pursuant to a 1993 agreement to exercise its option for 500 acre-feet of water. Also, the Willows Water District paid \$1.0 million in advance of the due date and continued high levels of activity in the home building industry accounted for \$3.2 million.

Participation receipts of \$6.4 million exceeded the budget by \$2.7 million Receipts for Colorow Reservoir were \$1.7 million more than expected due to schedule changes. Tap fees for existing facilities were \$1.0 million more than budgeted.

#### Operation and Maintenance:

Operation and Maintenance expenditures in 2000 of \$80.8 million exceeded the budget by \$540,000 (0.7%). Increases for health insurance (\$1.1 million), Workers Compensation (\$375,000) and unused sick leave paid to retiring employees (\$263,000) were partially offset by a decrease for the retirement plan defined benefit contribution (\$1.2 million), as a result of excellent stock market performance.

#### Capital Expenditures:

In 2000, capital expenditures of \$82.9 million were \$807,000 (1.0%) more than budgeted primarily due to unanticipated gravel pit acquisitions (\$15.1 million) and the purchase of Leyden Gulch Reservoir property (\$1.6 million). These overages were offset by changes in the construction schedule for Reuse Plant construction (\$4.0 million), gravel pit storage (\$2.3 million), construction of a new building at the West Side complex to house carpenter and paint shops, vehicle control center, maintenance office, and other activities (\$2.0 million), Gross Dam outlet works slide-gates (\$1.9 million), natural gas engine installations at Lone Tree and Highlands (\$1.9 million), a new GIS computer system (\$1.8 million), and construction of Colorow Reservoir Basin 1 (\$1.2 million).

#### Number of Employees:

The number of actual regular employees has decreased from a high of 1,045 in 1990 to 1,006 at the end of 2000, a decrease of 39 (3.9 percent). The number of customers has steadily increased by 11.6% during the same period. This increase in productivity has been accomplished through the elimination of low priority activities, increased efficiencies and the use of contractors instead of full-time employees when cost effective.

#### Payroll and Benefits:

Payroll expenses in 2000 were \$51.7 million, \$0.3 million less than budgeted due to position vacancies. Payroll increases have averaged 2.5% over the last three years. Employee benefit plan premiums were \$16.9 million; \$0.2 million (1.0%) more than budgeted as a result of increases for health care costs, workers compensation and unused sick leave paid to employees upon retirement.

#### **Designated Balances:**

The Designated Ending Balance for System Operations and Capital for year-end 2000 of \$165.6 million was \$27.1 million more than budgeted. This increase was substantially due to higher than expected sales of water of \$18.2 million, System Development Charges of \$6.5 million and \$2.7 million for Participation fees.

The allocation of the 2000 Designated Ending Balance is as follows: Operation and Maintenance in the amount of \$20.2 million, Non-expansion Capital in the amount of \$13.2 million, Debt Service reserves of \$31.6 million, Self Insurance reserves of \$7.0 million and Future Capital projects of \$87.8 million. The Designated Balance for the Land Sales Account was \$5.8 million at year-end.

#### 2001 Budget

#### Receipts:

Operating receipts of \$139.4 million are projected based on normal climatic conditions, a 2.5% rate increase effective January 1, 2001 and additional growth in the number of customers. This is \$12.0 million less than receipts in 2000 when water sales were up due to warm weather and higher consumption levels.

#### Operation and Maintenance:

Operation and Maintenance expenditures for 2001 are budgeted at \$82.1 million, \$1.2 million (1.5%) more than actually spent in 2000. The increase includes \$450,000 for automated meter reading devices (new services and repairs), hiring of new employees, and a 2.7% wage and salary increase.

#### Capital Expenditures:

The 2001 capital expenditure budget is \$106.4 million, \$23.4 million more than spent in 2000. The difference is substantially due to construction of the new Reuse Plant (\$17.6 million), implementation of the Automated Meter Reading project (\$7.3 million), construction of a new building to house the carpenter and paint shops, vehicle control center, car wash and maintenance offices at the West Side Complex (\$3.1 million), GIS computer system (\$1.1 million), Foothills Treatment Plant Disinfection facility (\$5.8 million) and Marston Treatment Plant upgrades (\$6.0 million).

#### Number of Employees:

The number of authorized regular full time employees is projected to increase by 14 (1.3%) to 1,060.1 in 2001. Seven of the new positions will replace consultants in the Information Technology section. The Engineering division will increase by five positions to handle the additional workload resulting from increased construction activity over the next several years. The Operation and Maintenance Division will add two positions related to the new Reuse Plant.

#### Payroll and Benefits:

Budgeted payroll for 2001 is \$54.6 million, an increase of \$2.9 million (5.6%) over 2000 due to a 2.7% wage increase effective January 1, 2001 and the hiring of new employee positions. Employee benefit plan premiums are budgeted at \$18.1 million for 2001, an increase of \$1.2 million (6.9%) from 2000. The Board's payment for the defined benefit retirement plan is expected to be \$690,000 more than 2000 based on an expectation of normal stock market returns. Health insurance costs are expected to increase by \$358,000 due to rising medical costs and Social Security costs are expected to increase by \$258,000 due to wage increases and increases to the social security contribution limits.

#### **Designated Balances:**

The ending balance for 2001 is estimated to be \$139.8 million. This is \$25.8 million less than the previous year due to planned uses for capital projects. The balances at end of 2001 are comprised of System Operations, \$23.5 million, Non-expansion Capital, \$11.6 million, Debt Service, \$43.8 million, Self Insurance, \$7.5 million, and Future Capital, \$46.5 million. The Designated balance for the Land Sales Account is budgeted to be \$6.8 million at year-end 2001.

#### **Financial Overview**

Denver Water's financial status is strong and is projected to continue so over our planning horizon of ten years. Moody's, Standard and Poor's and Fitch IBCA rate Denver Water bonds Aa2, AA+ and AA, respectively in ratings. We will continue to monitor capital expenditures, water rates, debt levels and designated balances to minimize rate increases or unanticipated large fluctuations in water rates. Designated balances for System Operations and Capital projects are projected to meet or exceed targeted levels. Over the next ten years, financial indicators for Denver Water are projected to remain strong and within conservative and prudent limits.

I am confident that this budget is a responsible plan for operations and development of the Denver Water system in the next year. It provides for important and needed increases in capital expenditures for improvements to water treatment processes, development of the Reuse Treatment Plant, and construction of a new building at the West Side Complex. At the same time, Operations and Maintenance expenditures are projected to be only slightly higher than in 2000.

Sincerely

H. J. Barry Manager Charter Denver Water was established in 1918 by the people of Denver as an independent agency with duties and responsibilities specifically spelled out in the City Charter. Since that time, the Denver Board of Water Commissioners has supplied water to Denver and contract distributors adjacent to Denver in accordance with the following charter directives: (See service area map on page 33).

The Board shall "... have complete charge and control of a water works system and plant for supplying the City and County of Denver and its inhabitants with water for all uses and purposes." Charter of the City and County of Denver, C4.14.

The Board shall fix rates which ".... shall be as low as good service will permit ..." and "..... may be sufficient to pay for operation, maintenance, reserves, debt service, additions, extensions, betterments, including those reasonably required for the anticipated growth of the Denver Metropolitan area and to provide for Denver's general welfare." Charter of the City and County of Denver, C4.22.

Mission Denver Water will provide our customers with high quality water and excellent service through responsible and creative stewardship of the assets we manage. We will do this with a productive and diverse work force. We will actively participate in and be a responsible member of the water community.

**Organizational Values** - Our values describe the guiding principles and beliefs governing how all employees of Denver Water are expected to meet their responsibilities in carrying out the mission of the organization. These values provide the framework for effectively reaching decisions and guiding future actions within the Department.

We exist for the purpose of serving our customers.

We value our heritage of providing a high quality product and excellent service at a reasonable cost.

We strive to be responsible and accountable stewards in our use of public land and water, and environmental and financial resources.

We value a work force that reflects the diversity of the community we serve.

We expect accountability from Management in accomplishing the goals of the organization.

We manage water supply based on a long-term perspective on water issues.

We strive to show respect and courtesy in our relationships with others.

We want to be progressive, creative and open to new ideas and technologies to meet the challenges of the future.

We value the safety of our customers and the public.

We promote the highest level of health and safety for our employees.

We value our employees and enlist their contributions in operating, planning and policy matters

We encourage employees' management of their career development.

#### Strategic Plan Vision for 2005

The Strategic Plan is the basis for setting priorities and determining Denver Water's future direction. The current Strategic Plan was revised in the spring of 1997.

#### Leadership

We will maintain the Denver Water system as one of the best in the country.

We will respect the natural environment.

We will be a leader in water conservation.

We will participate and provide leadership in all major Front Range water supply and water quality issues.

We will encourage and create cooperative projects with others.

We will possess credibility and influence with public, regulatory community, media and decision-makers at all levels of government.

#### Products & Services

We will provide drinking water that is always safe and meets our customers' expectations of quality and reliability.

Our customers will be pleased with our service, responsiveness and courtesy.

Our customers will believe that they receive high value for the cost of their water.

Our facilities will be well-maintained, running efficiently and reliably.

We will provide non-potable water for irrigation and industrial purposes.

We will take increasing advantage of technology to meet our goals.

We will anticipate new markets in order to provide ancillary products and services.

We will accommodate the recreational interests of the public, where practicable.

#### Organization

We will recognize and value the contributions of employees at every level.

We will remain a municipal organization that serves an increasing customer base without significant increases in numbers of employees.

Our Management and Staff will be worthy of the Board's trust and confidence.

Our entire organization will work diligently as a team, committed to the goals of the organization.

Our organizational culture will encourage open communication, creativity, risk taking and learning at all levels for the continual improvement of our products and services.

Our organization will accommodate a changing work force, including differing technological skills, languages, backgrounds and family demands.

Our employees and distributors will take pride in the professionalism of Denver Water.

We will emphasize the safety and health of employees.

All of our employees will be familiar with events and procedures at Denver Water and will be able to explain them to others.

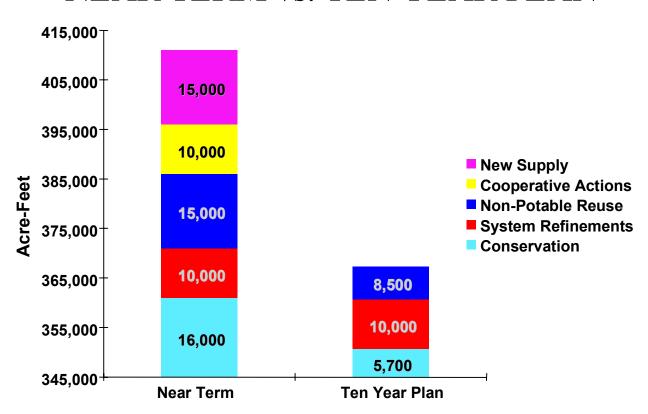
All of our employees will possess the skills and accept the responsibility to manage their own careers.

#### **Integrated Resource Plan**

In addition to meeting existing customers' needs today, Denver Water must also plan for and meet future customer needs. For that reason, Denver Water conducts a continual and dynamic Integrated Resource Planning (IRP) process that has recently resulted in a Board Resource Statement to define how Denver Water expects to meet future customers' needs.

Results of the IRP indicate that additional water supply, water reuse, and/or demand management will be required after 2013. By 2045, Denver Water will need an additional 100,000 acre-feet of water over existing supplies to meet customer demand assuming the Board maintains the full 30,000 acre feet of safety factor. The Board's Resource Statement mapped out a near term strategy that emphasizes aggressive conservation, non-potable reuse, and low cost system refinements as the first means of meeting demand beyond 2013. The initial implementation of that strategy is expressed in the Board's current Ten-Year Program as presented below.

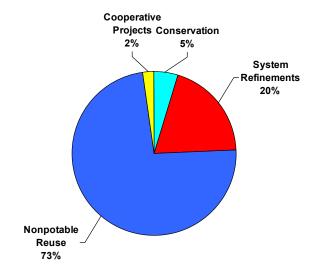
## NEAR TERM vs. TEN YEAR PLAN



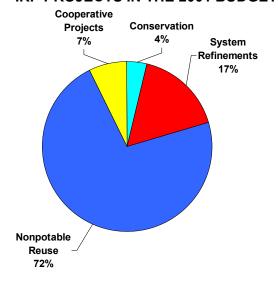
N:\GENPLAN\TMC\MAY19-98.PPT

The continuity of 2001 Annual Budget expenditures with the Ten Year IRP implementation Plan is presented below.

# IRP PROJECTS IN TEN-YEAR PROGRAM 2001-2010



#### **IRP PROJECTS IN THE 2001 BUDGET**



# Integrated Resource Plan Projects (Thousands of Dollars)

The table below presents 2001 Annual Budget, Ten-Year Program, and total planned expenditures by specific IRP categories and projects.

IRP Projects (Listed in IRP order*)	2001 Budget	Ten-Year Program (2001-2010)	Total Project Cost	Estimated Additional Water Yield
		,		(Acre-Feet)
CONSERVATION				
Outdoor Irrigation Efficiency	388	738	26,902	12,258
Xeriscape – General	221	1,508	1,500	6,961
Xeriscape – DW Properties	157	1,720	613	50
Indoor Use (Retrofits/Audits)	253	3,238	1,828	9,839
Subtotal	1,019	7,204	30,843	29,108
NONPOTABLE REUSE				
Nonpotable Reuse Project	19,416	111,400	139,000	15,300
SYSTEM REFINEMENTS				
Gravel Pit Storage	2,226	19,200	26,400	5,000
Central Platte Valley Parks	1,448	1,010	1,900	200
High Line Canal Water Rights	196	1,380	1,300	4,000
City Ditch Water Rights	20	360	300	1,000
Lawn Irrigation Return Flows	329	2,520	2,300	500
Nevada Ditch Pump Station	19	20	5,200	2,000
Farnell Lane Water Rights	10	20	100	150
Meadow Creek Water Rights	0	3,330	3,700	600
Antero Contract Rights	11	660	960	300
Elk Creek Water Rights	0	140	200	60
Platte Canyon Reservoir	0	0	600	200
Marston Seepage	0	0	310	400
City Ditch Pump Station	0	120	7,100	2,200
Willis Case Golf Course	242	1,400	3,200	280
Subtotal	4,501	30,160	53,570	16,890
NEW SUPPLY AND COOPERATIVE	PROJECTS			
New Supply Proj 11 Mi. or St.Ck.	42	300	Unknown	Unknown
Cooperative Project Southern Tier	75	150	Unknown	Unknown
Cooperative Project Northwest Tier	1,808	2,650	Unknown	Unknown
Cooperative Project Northeast Tier	4	10	Unknown	Unknown
Cooperative Project Aurora/Antero	36	220	Unknown	Unknown
Subtotal	1,965	3,330	Unknown	Unknown

GRAND TOTAL 26,901 152,094 Unknown Unknown

<sup>\*</sup>Please note – the projects are categorized as they appear in the IRP and not as they are classified in the 2001 budget document. Project costs and yields reflect original IRP estimates and will be revised with the IRP update in 2001.

#### **Financial Policies**

The financial policies set forth below are the basic framework for the financial management of Denver Water. The policies are intended to assist members of the Denver Board of Water Commissioners (Board) and Denver Water's staff in evaluating current activities and proposals for future programs. The policies are to be reviewed on an annual basis and modified to accommodate changing circumstances or conditions.

#### **Basis of Accounting and Financial Reporting**

- 1. Denver Water shall prepare its financial reports in accordance with generally accepted accounting principles as established by the Governmental Accounting Standards Board.
- 2. The fiscal year for Denver Water shall begin on January 1 of each calendar year and will end on December 31 of the same calendar year.
- 3. Following the conclusion of the fiscal year, the Accounting section shall publish a Comprehensive Annual Financial Report (CAFR) prepared in accordance with generally accepted accounting and financial reporting principles established by the Governmental Accounting Standards Board.
- 4. The CAFR shall include the audited financial statements, including the opinion of the independent certified public accountants.
- 5. The Accounting section shall, each month, analyze the prior month's results and issue monthly reports comparing financial results for the prior month and year to date with the same periods for the prior years.

#### **Annual Budget**

- 1. Denver Water's Manager and Staff will prepare the annual budget in the context of a long-term financial plan.
- 2. The Board shall, at its option, appoint one or more of its members to a budget review committee to meet with the Manager and Directors to review and provide guidance for the Long Range Plans and Annual Budget.
- 3. The Fiscal Planning and Performance (FP&P) Section, prior to the end of December each year, shall submit to the Board the annual budget covering the next fiscal year. The budget shall contain the following information:
  - a) A letter from the Manager discussing the proposed financial plan for the next fiscal year, a review of the previous year's activities and the current financial condition of Denver Water.
  - b) Proposed capital, operations and maintenance and debt service expenditures by program and type of expenditure for the budget year, along with comparisons to estimated expenditures for the current year and actual expenditures for three prior years.
  - c) Proposed receipts, by source, for the budget year, along with comparisons to estimated receipts for the current year and actual receipts for three prior years.
  - d) Debt service policies and a comparison of actual ratios to target ratios.
  - e) A table of organization with proposed staffing levels by division and section, along with comparisons to staffing levels for the current year.
  - f) A summary of designated balances for system operations normal replacements and improvements, debt service, self-insurance and future capital projects.

- 4. At least one public Board meeting shall be conducted prior to adoption of the budget.
- 5. The Board shall review the budget, making any additions or deletions that feel appropriate, and shall, at the last Board meeting of the year, adopt the budget by quorum. If the Board fails to adopt the budget, Denver Water shall continue to operate with specific instructions from the Board regarding debt service, system operations and capital expenditures.
- 6. On final adoption, the budget shall be in effect for the budget year. It shall guide the activities of the Manager and Staff for the budget year.
- 7. The annual budget document shall be published in conformance with the Government Finance Officers Association's Distinguished Budget Program criteria. The final budget document shall be published no later than 90 days following the date the Board adopts the budget.
- 8. The FP&P section shall monitor actual receipts and expenditures and shall compare them to budgeted receipts and expenditures on a monthly basis. The FP&P section shall report variances from budgeted receipts and expenditures for the month and year to date to the Board and to the Manager and Staff.

#### **Revenues and Expenditures**

- 1. Denver Water will set fees at a level that recovers the projected full cost of providing service pursuant to the City Charter.
- 2. In planning expenditures, Denver Water will follow the City Charter's mandate to keep rates as low as good service will permit. In general this means that Denver Water will maintain its facilities and continuously seek ways to operate more efficiently.

#### **Debt Service**

Debt Service policies are provided in Section 6 Debt Service, beginning on page 99.

#### **Long Term Financial Plans**

- 1. Denver Water's Manager and Staff shall annually prepare a capital project plan that shall identify all capital improvements likely to be needed during the next ten years to satisfy projected growth in demand for water and to maintain existing capacity to provide water.
- 2. Each year the Manager and Staff will propose a ten-year Operations and Maintenance Plan that shall identify expenses for normal operations, including significant changes to current operations and expenses arising out of planned capital projects.
- Each year Denver Water will develop a ten-year Financial Plan that which incorporates
  projected revenues and expenditures included in the capital and O&M plans. The ten-year
  Financial Plan shall be used to develop one or more scenarios for financing projected
  expenditures.
- 4. The long-term plan will incorporate the Manager and Staff's assumptions with respect to revenues, expenditures and changes to designated balances over a ten-year horizon. The assumptions will be evaluated each year as part of the long-range planning and budget development process.

#### **Budgeting Process**

Overview The highest policy level includes the Strategic Plan and the Integrated Resource Plan. The Strategic Plan provides the overall mission, values and goals (see pages 1-2). The Integrated Resource Plan provides specific operational policies regarding future water demand and supply options. A summary of these policies is on pages 3-7. The long-range plans are the financial expressions of these governing factors over a ten-year period. The annual budget is the definition of needs and allocations of available resources to accomplish the next year of the long-range plans.

Long Range Denver Water maintains long-range (10 years) capital, operations and maintenance **Planning** and financial plans that are updated annually. The capital plan projects additions, improvements and replacements to water system facilities, based on projected demands for water (Integrated Resource Plan), Federal and State regulations and ongoing system requirements. It is used as the basis for projecting the Capital Work Plan budget. The Operations and Maintenance Work Plan includes the ongoing costs of operating and maintaining the water system and the impact of the Capital Work Plan on operations. The financial plan projects the yearend total designated balances. These balances result from the application of projected receipt sources available for projected capital, operation and maintenance and debt service expenditures. Alternative financial plans that address estimated revenue shortfalls are also projected as a part of the long range planning effort.

Annual Work Plan **Budgets** 

The detailed annual work-plan budgets for operation and maintenance activities, debt service and capital projects are developed during the budget process each year. These budgets are substantially based on the budget year projections provided by the Long-range plans. These work plans itemize the cost of activities and projects within each program (See page 59 for description of programs).

Annual **Budget Preparation** 

The annual budget is prepared on a program budget basis that follows the flow of water from the sources of raw water to customers' taps and cuts across organizational boundaries. The focus is first on what Denver Water as a whole is doing (what our resources are used for), then on organizational structure (the divisions and sections expending the resources), and then by type of expenditures (what types of resources – payroll, services, etc., are being used). The intent of this particular format is to facilitate the reader's understanding of how we are accomplishing our mission to serve our customers needs in the past, present and future.

All Cost Control Centers prepare their budgets on a capital project, operations and maintenance activity by type of expenditure by month basis. Budget development, monitoring and control reports are then available to budgeters and managers from project. Cost Control Center, and type of expenditure perspectives at summary and detail levels. The 2001 annual Capital Work Plan budget consists of 263 specific projects. The 2001 Operation and Maintenance Work Plan budget includes 174 specific activities. While some Cost Control Centers may budget to as few as four or five projects and activities, others may budget to 50 or more. This method provides the detailed "working" budget and reporting mechanism for in-house purposes.

Cost Control Centers enter their budgets into a centralized computer system. This system is able to provide budget and actual information for combinations of cost control center, master plan item (projects and activities) and types of expenditures for any month or year to date of months. The Cost Control Center budgets are then combined to collect costs on a department-wide basis for each of the projects and activities in the work plans. The information contained in the work plans and Cost Control Center budgets is summarized in this document.

#### Budget Basis

The annual budget is prepared on a modified accrual basis in which expenditures are reported and budgeted "as booked." The difference between expenditures "as booked" and disbursed is then included in Supporting Activities (Operation and Maintenance) as an adjustment. The adjustment converts the budgeted expenditures to a cash basis in order to determine the ending total of designated balances for system operation and land sales account amounts for presentation purposes. This differs from the basis of Accounting, which uses the full accrual method in accordance with the Government Accounting Standards Board (GASB).

#### Accounting Basis

Denver Water's financial statements are accounted for on the flow of economic resources measurement focus, using the accrual basis of accounting. Under this method, all assets and liabilities associated with operations are included on the balance sheet, revenues are recorded when earned, and expenses are recorded at the time liabilities are incurred. Denver Water applies all applicable pronouncements of the Government Accounting Standards Board (GASB).

#### Budget Schedule

The 2001 budget development schedule on page 15 shows the process from the Integrated Resource Plan to Long Range Planning process to development of the annual budget and resulting budget approval by the Board of Water Commissioners.

#### Budgeting Units

Denver Water is divided into seven operating divisions totaling 88 budgeting units or cost control centers. Seventy-nine of these cost control centers are comprised of groups of employees based on organizational structure. The remaining 9 are used to budget and control materials and supplies purchased for the warehouse, office furniture and equipment, personal computers and related expenditures and adjustments.

## Amending

Amounts budgeted for specific projects and activities may be revised through the The Budget issuance of a special authorization. A special authorization request showing the budget code, cost control center(s) involved, reason for variance, amount of variance, revised estimate and schedule is prepared by the requesting Division. It is then approved by that Division Director and, if needed, the Manager, who will determine if Board approval is also required.

### Budget And Approval

Denver Water is not required by City Charter or state law to make its draft budget **Presentation** available to the public prior to its adoption by the Board of Water Commissioners. The preliminary 2001 budget has been reviewed by the Board's Budget Committee. presented in summary at one or more public Board meetings and presented in draft to the entire Board prior to its approval.

Budget Presentation Award

**Distinguished** The Government Finance Officers Association of the United States and Canada (GFOA) presented an Award of Distinguished Budget Presentation to Denver Water for its annual budget for the fiscal year beginning January 1, 2000.

In order to receive this award, a governmental unit must publish a budget document that meets program criteria as a policy document, as an operations quide, as a financial plan and as a communications device.

The award is valid for a period of one year only. We believe our current budget continues to conform to program requirements, and we are submitting it to GFOA to determine its eligibility for another award.

**Controls** Periodic reports are provided to the Board of Water Commissioners, Manager, Division Directors, Cost Center Managers and Budget Coordinators. Key

**Updates** reports include:

<u>Monthly Budget Status Report</u> - Provides the Manager and Division Directors with graphs and summary tabulations of actual and budgeted receipts and expenditures for the month and year to date. Also included are explanations of major receipt, expenditure and designated balance variances and graphs showing each Division's budget performance. Divisional Budget Coordinators also receive this information plus a detailed Receipt and Expenditure Budget report and a Gross Payroll Budget report by Division and Cost Center.

<u>Monthly Budget Performance Report</u> - Provided to the Board, Manager and Division Directors. Compares receipts to related capital and operating expenditures for the month and year-to-date that are additionally broken down by type of expenditure.

<u>Monthly Budget Variance Explanation Report</u> - Each month, cost centers are required to explain significant variances between budgeted and actual expenditures.

<u>Monthly Cost Control Center Budget Report</u> - Each Cost Control Center is provided with a comparison of month and year-to-date actual and budgeted expenditures by type of expenditure (Payroll, Materials, etc). Annual budget amounts are also shown for comparative purposes.

<u>Monthly Cost Control Center by Master Plan Item Report</u> - This is a summary level report. Focus is on the capital projects and operation and maintenance activities that a cost center has budgeted and/or charged during the year.

<u>Additional Reporting</u> – Additional reports can be created by the budgeters in the format and levels of detail required from the budget system.

## Financial Structure

Denver Water is limited by City Charter to have only one fund, the Water Works Fund, for all of its receipts and expenditures. The balance of the Water Works Fund Is referred to in this budget document as the Designated Balances, Capital and Land Sales Account.

The Chart of Accounts utilized by Denver Water generally follows the structure presented by the National Association of Regulatory Utility Commissioners for Class A Water Utilities. The accounting system adheres to standards set by the Governmental Accounting Standards Board (GASB) and is audited annually by an independent CPA firm.

The Water Works system is completely funded through rates, fees and charges for services provided by Denver Water. Although Denver Water is an enterprise fund, there are no transfers to or from the general fund of the City and County of Denver.

Water rates pay for operation and maintenance expenses, repair and capital replacements and modifications to existing facilities, debt service principal and interest. Capital expenditures for new facilities and water supply are generally funded from other non-rate sources of funds: System Development Charges, and front-end participation from developers, and reimbursements.

#### How to Read the 2001 Budget

#### From Summary to Detail

The 2001 Budget is arranged for easy reference. An overall summary is provided at the beginning of the budget. Summary level information is also presented at the beginning of each section within the budget document. Additionally, the narratives include references to related information found elsewhere in the document.

**Components** Furthermore, each section of this budget booklet describes a particular component of the budget, as follows:

<u>For summary overview of the entire 2001 Budget</u> - Read Section One. This section provides an overview of 2001 budgeted receipts, expenditures, designated balances and number of employees. It also includes a brief history of Denver Water and maps showing the area it serves and location of major facilities.

For receipt forecasts - Read Section Two. This section provides information on all types of receipts.

<u>For expenditures by program</u> - Read Section Three. This section categorizes expenditures by program. Each major component of the process of providing water to our customers; raw water, reuse of water, treatment, delivery to customers, and general operations, are considered as programs. Each program is then further broken down into operation and maintenance and capital components. This format allows evaluation of the cost of each component of providing water from source to customer. Down to detailed operation and maintenance activities and capital projects. It indicates why (for what activity or project) the expenditures are made. Information on both operation and maintenance activities as well as capital improvement and replacement projects is also provided.

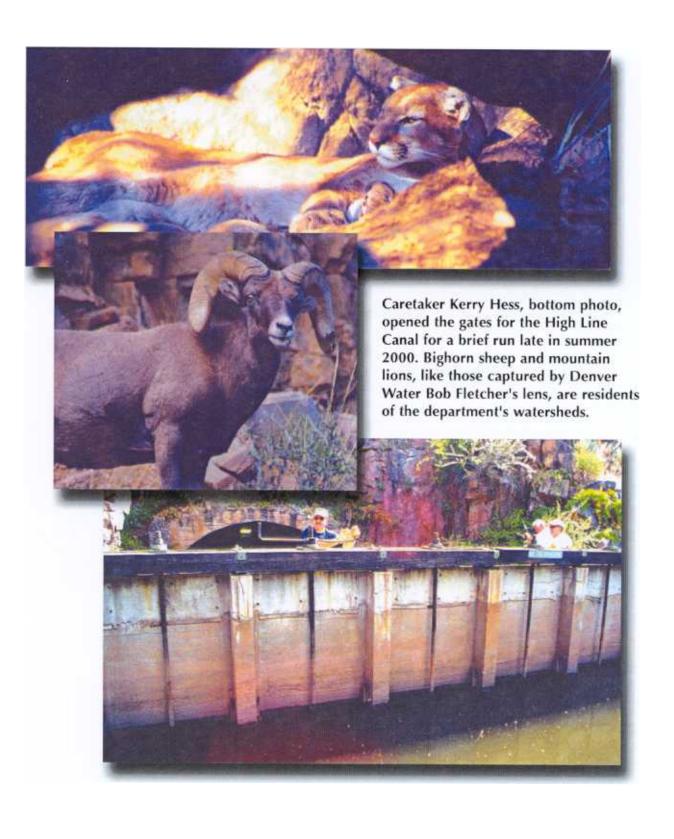
<u>For expenditure by type</u> - Read Section Four. This section classifies total expenditures according to what was purchased, without regard to the activity or whether the expenditure was operation and maintenance or capital in nature. This section has information on the expenditures for labor, purchases of materials, services, equipment, construction contract payments, debt service and refunds.

<u>For information on Denver Water's organizational structure and performance measures - Read</u> Section Five. This section shows detailed number of employees, table of organization, activities by division and key performance measures for the organization.

<u>For information on debt service -</u> Read Section Six. This section includes Denver Water's debt policy, debt service schedules and description of Certificate of Participation projects.

<u>For information on cash flow</u> - Read Section Seven. This section shows the impact of the 2001 budgeted receipts and expenditures on the designated balances and describes how these balances are to be used.

<u>For terms used in the budget document</u> - Read Section Eight. This section contains a glossary of terms.



#### Denver Water 2001 Budget - Summary

2001 Beginning Balance The 2001 Budget begins with a projected designated balance totaling \$165,594,000. For a detailed breakdown of this amount, see page 108.

**Receipts** Total receipts for 2001 are forecast to be \$194,222,000, including receipts of \$139,465,000 from the sale of water. Non-operating, interest, hydropower and other receipts total \$14,883,000.

Receipts used for the construction of new facilities include \$3,915,000 for participation receipts (front-end payments to the Board for capacity in specific facilities to serve specific groups of customers) and \$21,300,000 for System Development Charge receipts (tap fees). Reimbursements include \$87,000 related to Strontia Springs Dam operations, and \$300,000 for installation of non-potable distribution system mains (Central Platte Valley project), \$1,200,000 for Conduit 153 relocation work and \$50,000 for various smaller projects, for a total of \$1,637,000. Land sales account related proceeds plus interest earned on the account balance are projected to total \$1,863,000. Proceeds from the Board's annual refunding program are expected to be \$11,159,000.

**Expenditures** Total 2001 expenditures are budgeted at \$220,066,000. Operation and maintenance expenditures are budgeted to be \$82,059,000. Capital expenditures are budgeted at \$106,378,000. Debt Service and related costs are budgeted to be \$31,629,000.

Major capital projects include engineering and construction for the new reuse treatment plant (\$19.4 million), additions and improvements to Foothills and Marston treatment plants needed to meet Federal and State regulations (\$22.7 million), Automated Meter Reading program, (\$8.9 million), Conduit 94 upgrade (\$1.4 million), Conduit 138 construction (\$1.4 million), constructing a new building at the West Side Complex to house carpenter and paint shops, vehicle control center, maintenance office and car wash (\$3.9 million), transmission and distribution main improvements and replacements (\$4.2 million), motor vehicles and heavy equipment (\$2.3 million) and new financial, GIS and other computer systems and equipment (\$4.9 million).

Budgeted operation and maintenance and capital expenditures have been categorized into programs that reflect the major areas of activity in which Denver Water engages to accomplish its goals. Section 3, pages 59 through 76, provides a detailed breakdown of expenditures by program.

Expenditures have also been categorized by "type", i.e., a listing of what types of commodities will be purchased. Section 4, pages 77 through 80, provides a detailed breakdown of expenditures by type.

2001 Endina **Balance** 

The 2001 budgeted expenditures of \$220,066,000 are \$25,844,000 more than projected receipts of \$194,222,000 resulting in ending designated balances totaling \$139,750,000. The designated balances for system operations and capital is maintained to cover a portion of: (1) operation and maintenance, (2) non-expansion capital, (3) debt service, (4) self-insurance and (5) future capital projects. The Land Sale Account is comprised of proceeds from land sales, less Board specified water system expenditures plus interest earned on the balance of the account. For more details, see Section 7, Designated Balances Summary.

#### 2001

Number of The 2001 proposed regular and introductory number of employees of 1,060.1 is 14.0 **Employees** more than authorized for 2000.

A net of 14 new positions are being added in 2001. Information Technology is adding seven new positions which will be used to replace six consultants and one project employee. Engineering is adding five engineer positions to handle substantially increased capital construction workloads in such areas as the new Reuse plant and Water Treatment plant upgrades. Operation and Maintenance is adding five new positions, two of which are related to the new Reuse plant. Human Resources and Public Affairs are adding one and four positions, respectively. These additions are substantially offset by eight vacant positions being deleted, and changes in hours for regular parttime employees. A comparison of 1997 through 1999 actual, authorized and actual 2000, and budgeted 2001 regular and introductory, temporary, project casual and part-time employees is shown on pages 81 and 84. Additional information by Division is available on pages 86-93. A summarized organization chart that shows reporting relationships is on page 85.

Summary Contents	Page(s):
2001 Budget Summary Descriptions	19
The Budget at a Glance 1997 – 2001	21
Summary of Projected Receipts and Expenditures 2000-2001	23
Crosswalk of 2001 Budgeted Receipts to Related Capital and Operating Expenditures by Type of Expenditures	24
2001 Receipts and Expenditures Budget Graphs	25
2001 Program Budget Graphs	27
Customers served per Regular Employee 1992 – 2001	29
Denver Water – A Condensed History	31
Denver Water Service Area, Population and Demand	33
Denver Water Collection System Map	39
Statistical Summary Data 1994-1999	41
Customer Service Data 1994-1999	42

After decades of watching warring private water companies struggle to bring drinking water to the city, often at exorbitant rates, Denver residents voted in 1918 to pass City Charter amendments creating the Denver Board of Water Commissioners. Voters also approved purchase of the Denver Union Water Company, transforming it into a public agency whose mission remains providing healthy drinking water at a fair price.

Denver Union was the survivor of 11 private companies that attempted to supply water to the growing community at the foot of the Rockies. They ranged from the Capitol Hydraulic Company of 1860 - incorporated to dig a ditch from the South Platte River to Brown's Bluff, now the Capitol Hill section of Denver - to the wiley and powerful Denver Union headed by such movers and shakers as Walter Scott Cheesman, David Moffat and E. S. Kassler.

Since Denver Union had been deeply involved in municipal politics, provisions of the 1918 charter amendments require a totally separate water works fund out of reach of the general city government. Conversely, the Water Board has no access to city general funds. This was intended to assure that the Water Board performs its sole task of supplying water to the inhabitants of Denver "for all uses and purposes and ...at the lowest rates good service will allow." The charter also directs the water system to pay its own way through charges for water service and earn enough for "betterments and improvements" to the system. Denver's pioneers had experienced the semi-arid nature of what early explorers had called "the Great American Desert" and wanted a "never failing" water supply, according to early newspaper accounts.

Only a few years after taking over the well-developed Denver Union system, the new five-member Water Board was faced with its first impending shortage of water. Population growth was rapidly transforming the city, and more water was needed. In 1924, Antero Reservoir, high in the South Park hay meadows near the headwaters of the South Platte River, was acquired to augment supply. In the late '20s, just before onset of the Great Depression and Dust Bowl, the Water Board committed to build Eleven Mile Canyon Reservoir on the edge of South Park to assure supply. In the early '30s, the Board made use of transmountain water rights by using the pilot bore of the famous Moffat Railroad Tunnel to send water to the drought-plagued city. Descriptions of the first flow of water through the tunnel were carried coast-to-coast by radio networks, and throngs of people took chartered trains to the east portal of the water tunnel to "cheer the water on to the city to end the drought." Later, Gross Reservoir was added to this system to store water from Moffat Tunnel.

The end of World War II brought yet another population boom to the Denver area, and the Water Board was again faced with a shortage of water to meet the needs of growth. Work had been started on the Roberts Tunnel under the Continental Divide to bring water to the city from the Blue and Snake rivers and Ten-Mile Creek by way of the North Fork of the South Platte. A continuing debate over the size of the dam to build at Dillon to divert water into the tunnel was resolved in favor of a "high dam," thus creating Dillon Reservoir in 1963, Denver's largest single storage facility and one of the state's premier recreational attractions.

Modern treatment plants process water before sending it to customers' taps through a network of more than 2,500 miles of mains under city and suburban streets. The Foothills Plant, completed in 1983, is considered a state-of-the-art facility capable of producing more than 280 million gallons of treated water daily to meet customer demands on hot summer days. Foothills, built at an elevation that eliminates the need to pump water into the system and its attendant cost, serves as the primary plant throughout the year. The Marston Plant, on West Quincy Avenue, and the Moffat Plant, on West 20th Avenue, helps meet summer peak demands. Foothills and Marston are undergoing major renovation to help assure high water quality and make it possible to meet or exceed new national drinking water quality standards. Moffat has recently undergone similar upgrades.

Generation of clean hydroelectric power has become increasingly important to Denver Water. Hydro generators at Foothills, Strontia Springs Dam, Dillon Dam and at the east portal of the Roberts Tunnel were added in the mid-1980s to augment power generated at the department's Williams Fork Dam. Another generator was added in the mid-1990s at the Hillcrest Pump Station in southeast Denver. Construction of a hydro plant at Gross Dam was expected to start soon.

Ground is expected to be broken in early 2001 on the department's \$140 million water reuse plant near the South Platte River in Commerce City. When the first phase is completed in 2003, up to 30 million gallons a day of treated, reuse water will be piped to industrial users and irrigators through a nonpotable distribution system. Denver Metro Wastewater will supply effluent to the system, which will include a treatment plant on the site of Denver Water's old water reuse demonstration plant, as well as pipelines, storage tanks and three pump stations. The reuse facility is a water resource project for Denver Water. At full capacity in 2013, it will supply about 17,000 acre-feet of reuse water a year, freeing raw water for potable treatment.

Denver Water now has responsibility for serving more than one million people, more than a quarter of the state's population. It uses less than two percent of the average annual flow of Colorado's rivers and streams to do it. Denver Water maintains a reputation as one of the nation's finest systems due to the solid foundation provided by the framers of Denver's City Charter amendments. They created an autonomous, independent and non-political Board of Water Commissioners with the singular purpose of meeting the water supply needs of the residents of a community located on the Great American Desert.

STATISTICAL SUMMARY 1994 – 1999	4000	4000	4007	4000	4005	400.4
	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>
Population served <sup>(1)</sup>	984,000	970,000	957,000	945,000	952,000	947,000
Total Treated Water Delivered/Consumption in Million Gallo Average Daily Consumption in Million Gallons	ns 75,232.01 206.12	77,466.65 212.24	75,363.33 206.47	76,203.96 208.21	65,267.91 178.82	76,516.08 209.63
Average Consumption per Capita in Gallons	209	219	216	220	188	221
Maximum Daily Consumption in Million Gallons	475.66	512.53	517.57	456.99	453.55	479.01
Maximum Hour Treated Water Use Rate (MGD) <sup>(2)</sup> Treated Water Pumped in Million Gallons	676.26 38,149.921	763.87 33.990.21	712.48 34,179.67	736.53 39,578.30	565.13 32,115.03	717.57 40.720.24
Treated Water Fulfiped III Willion Gallons	30, 149.92 1	33,990.21	34,179.07	39,376.30	32,113.03	40,720.24
Raw Water Storage Capacity in Acre Feet	545,476	545,476	545,476	545,476	545,476	545,476
Replacement Reservoir Storage Capacity in Acre Feet	96,822	96,822	96,822	96,822	96,822	96,822
Supply from South Platte River in Acre Feet <sup>(3)</sup>	210,777	190,948	194,478	131,242	178,286	134,116
Supply from Moffat System in Acre Feet	57,272	54,220	77,630	60,520	69,271	45,782
Supply from Blue River/Roberts Tunnel Sys in Acre Feet	54,064	48,384	92,174	89,268	98,176	90,479
Treated Water Pumping Capacity in MGD <sup>(2)</sup>	1,052.5	1,027.5	1,027.5	1,027.5	1,116.8	1,116.8
Raw Water Pumping Capacity in MGD <sup>(2)</sup>	92.2	92.2	92.2	92.2	92.2	92.2
Treatment Plant Capacity in MGD <sup>(2)</sup>	645.0	645.0	645.0	645.0	645.0	645.0
Treated Water Reservoir Capacity in Million Gallons	378.75	371.75	400.5	408.2	408.2	408.2
· ·						
Supply Mains in Miles (Mountain Collection System)	77.6	77.6	77.6	77.6	77.6	77.6
Supply Mains in Miles (Metropolitan Denver Area)	40.7	39.2	39.2	39.2	39.3	39.3
T & D Mains in Miles (inside Denver & Total Service Contract Distributors)	2,449.0	2,416.0	2,486.1	2,464.0	2,442.6	2,377.6
Nonpotable Transmission & Distribution Mains in Miles	16.4	15.6	15.6	14.7	14.6	2,377.0
Tronpotable Transmission a Biothbatton mains in mines	10.1	10.0	10.0		14.0	
Total Active Taps – End of Year <sup>(1)</sup>	278,374	274,908	271,338	268,676	271,999	268,506
Fire Hydrants Operated & Maintained	13,681	13,136	13,575	13,298	13,005	12,524
Breaks in Mains – Denver	195	166	251	200	147	222
Service Leaks	663	779	591	648	548	631
Fire Hydrants Tested and Repaired	25,052	27,150	26,188	14,894	18,086	16,195
Employees (Authorized Staffing)	1,044	1,036	1,032	1,030	1,031	1,063
Financial Information <sup>(4)</sup>						
Gross Property, Plant & Equipment	\$1,408,333	\$1.347.620	\$1.282.062	\$1,236,743	\$1,209,646	\$1.173.637
Net Property, Plant & Equipment (after depreciation)	1,082,973	1,042,918	993,753	968,496	959,945	941,516
Additions to Property, Plant & Equipment	65,806	73,095	47,664	33,178	38,491	35,355
0 (5)	0407.055	0400 F70	0404.074	0440 500	004.050	<b>*</b> 400 000
Operating Revenues <sup>(5)</sup> Operating Expenses <sup>(5)</sup>	\$127,655	\$128,570	\$121,074	\$118,580	\$94,952	\$100,992
Operating Expenses Operating Income	100,719 26,936	97,489 31,081	93,202 27,872	92,072 26,508	86,742 8,210	79,888 21,104
Net Income (Loss)	21,117	21,611	19,198	8,193	(6,883)	3,461
(2000)	,	,011	,	5,.00	(0,000)	5, .51
Retained Earnings (Reinvested)	\$467,545	\$438,851	\$410,129	\$384,448	\$370,098	\$371,225
Total Long-Term Debt <sup>(6)</sup>	294,757	299,773	329,486	334,618	340,598	346,806

NOTE: Actual 2000 statistics were not available at the time of publication.

#### Footnotes:

- (1) Population estimates based on treated water customers only. Beginning in 1996, population served and active taps exclude City of Broomfield.
- MGD = Million Gallons per Day.
  Supply includes effluent exchanges.
- (3) (4) (5)
- Amounts expressed in thousands.
  See "Detail of Revenues and Expenses."
- Includes current and Long-term portion of bonds payable, certificates of participation, and obligations under capital lease, net of discounts, premiums and deferred losses on advance refundings.

CUSTOMER SERVICE DATA 1994 – 1999	<u>1999</u>	<u>1998</u>	<u>1997</u>	<u>1996</u>	<u>1995</u>	<u>1994</u>
Active Taps <sup>(1)</sup> Beginning of Year Activated during Year Discontinued during Year	274,938 3,732 (296)	271,338 3,919 (319)	268,676 2,825 (163)	265,820 <sup>(5)</sup> 3,013 (157)	268,506 3,807 (314)	265,233 3,449 (176)
Net Increase during Year	<u>3,436</u>	3,600	<u>2,662</u>	<u>2,856</u>	<u>3,493</u>	<u>3,273</u>
Total Active Taps – End of Year	<u>278.374</u>	<u>274,938</u>	<u>271.338</u>	<u>268.676</u>	<u>271,999</u>	<u>268,506</u>
Service behind Master Meters	64,655	64,225	63,449	62,713 <sup>(5)</sup>	68,066	66,132
Active Flat Rate Taps, End of Year <sup>(1)</sup>	0	0	0	0	0	0
Active Meters (excludes customers behind Master Meters) <sup>(1)</sup>						
Inside City Read and Bill Total Service City and County Monthly	145,466 36,114 30,965 1,055 	143,602 35,379 30,575 1,019 	142,169 <sup>(4)</sup> 34,638 29,892 1,018 172	141,248 33,791 29,425 1,020 479	140,497 32,827 29,090 1,023 496	140,028 32,142 28,756 1,072 376
Total Active Meters Total Active Taps – End of Year	213,719 278,374	210,713 274,938	207,889 271,338	205,963 268,676	203,933 271,999	202,374 268,506
Stub-Ins on System <sup>(2)</sup>	3,086	3,483	1,895	2,422	2,215	2,825
Fire Hydrant Use Permits	1,132	1,185	999	918	849	930
Meters replaced by Denver Water	7,627	3,577	4,446	8,292	6,831	9,768
Turn-Offs due to Delinquent Accounts	7,920	7,992	8,650	9,317	9,329	5,907
In-Home Water Audits	1,092	1,751	1,637	1,343	1,403	1,501
Universal Metering Program: Flat Rate to Meter Conversion Number of Service Lines Repaired Feet of Service Lines Repaired/Replaced	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
Water Conservation Calls <sup>(3)</sup> Water Conservation Field Stops <sup>(3)</sup> Water Use Violations Issued <sup>(3)</sup>	0 51 0	0 64 0	0 48 0	0 66 0	0 75 0	0 115 0

NOTE: Actual 2000 statistics were not available at the time of publication.

#### Footnotes:

- (1) Service is on or has not been off for 5 consecutive years. Does not include taps sold to raw water distributors.
- (2) Stub-Ins are a connection made solely to extend the service line from the main to the valve at the property line prior to the paving of the street and are not considered a tap.
- (3) The summer Water Conservation Program has been voluntary since 1983. Starting in 1994, conservation calls were not recorded.
- (4) Beginning in 1997, large meters for wholesale distributors excluded from count, consistent with "Analysis of Customer Accounts for Treated Water."
- (5) Broomfield taps(6,179), removed from Master Meter counts in 1996.



#### **Receipts Forecast - Summary**

### Total Receipts

Total 2001 receipts are comprised of operating receipts from the sale of water to customers, participation receipts (front-end payments for capacity in specific facilities To serve specific groups of customers), System Development Charge receipts (tap fees), receipts from the issuance of bonds, as well as small amounts of non-operating and other receipts. Total 2001 receipts are forecast to be \$194,222,000. The following is a brief description of each receipt shown on page 46.

#### . Operating Receipts (Sale of water to customers)

Operating receipts are sales of water to customers. They are used to pay for normal operation and maintenance, replacement of facilities and plant as well as debt service. Operating receipts are forecast under the assumption that normal precipitation and other normal climatic conditions will exist during the budget year. The budget is then based on an analysis of historical trends and projections of future consumption, number of customers and rate structure factors. The 2001 budget of \$139,465,000 reflects a rate structure intended to encourage water conservation. Higher bills in the summer will be offset by lower bills in the winter. The 2001 budget includes a rate increase effective January 1, 2001, which is estimated to increase revenues by 2.4%. Actual 2000 operating receipts of \$151,490,000 are \$18.2 million more than budgeted primarily due to substantially warmer weather and higher water consumption than expected during 2000.

Approximately 55% of 2001 billed water sales revenue is projected to be from outside the City of Denver, while an estimated 48% of the customers are located outside the City of Denver. Water provided to outside customers is billed at a higher rate than for inside customers. Additionally, outside consumption per customer is also generally higher than for inside customers.

A breakdown of billed operating revenue by type of customer is shown on page 47. Billed operating revenues and number of customers by inside and outside Denver are shown on page 49. See pages 51-55 for additional information on rate structure.

#### . Non-Operating Receipts

These receipts are obtained from payments for services that Denver Water renders such as ditch assessments for delivery of non-potable water for irrigation, main inspections, installation of taps, the calculating and mailing of sewer bills, rents on Denver Water facilities and other such services. Total non-operating receipts for 2001 are projected to be \$3,200,000, based on historical trend. A breakdown by type of receipt is shown on page 47. Actual 2000 receipts of \$3,315,000 are \$398,000 higher than budgeted substantially due to more main inspections and materials sales than expected.

#### . Hydropower Receipts

These are receipts from the sale of surplus power provided by generating facilities at the Dillon, Strontia Springs and Williams Fork dams, Roberts Tunnel, Foothills Treatment Plant and Conduit 27 at Hillcrest. Hydropower receipts for 2001 are projected to be \$2,030,000 based on historical trend and anticipated rates for power generated. Actual 2000 hydropower receipts of \$2,108,000 are \$230,000 more than budgeted substantially due to higher power sales from the Roberts Tunnel and Williams Fork facilities than expected.

#### . System Development Charges

These are tap fees for new connections to the Denver Water system that represent a partial payment of capital costs to provide service from the necessary supply, storage and treatment facilities. The budget for 2001 is conservative in that it assumes a lower level of home building activity than experienced in 2000. System Development Charge receipts are projected to be \$21,300,000 for 2001 based on anticipated building trends. See pages 56-57 for additional information. Actual 2000 receipts of \$25,620,000 are \$6.5 million more than budgeted primarily due to an unbudgeted \$2.3 million receipt from Westminster and \$1.0 million from Willows Water District. Actual SDC receipts for 1997 includes a \$22.9 million receipt from South Adams County Water & Sanitation District for delivery of 4,000 acre-feet of potable water. Actual SDC receipts for 1998 include \$12.5 million from Public Service Company for delivery of 5,200 acrefeet of non-potable water.

#### . Participation Receipts

Participation receipts for 2001 are projected to be \$3,915,000. Major projects include the construction of Chatfield Reservoir, Tank #2, Colorow Reservoir, Conduit 138 at Belleview and Simms. See page 56 for additional information.

Actual 2000 receipts of \$6,392,000 were \$2.7 million more than budgeted due to an additional \$1.7 million received from Willowbrook Water and Sanitation District for construction of Colorow Reservoir, as a result of schedule changes and \$1.0 million more than budgeted for tap fees for existing facilities.

#### . Reimbursements

Reimbursements totaling \$1,637,000 are anticipated to be received during 2001. It is expected the Board will be reimbursed \$87,000 by the city of Aurora for its share of operation and maintenance expenses for the Strontia Springs Reservoir. An additional \$300,000 is expected from the City of Denver for installation of non-potable distribution mains related to the Central Platte Valley project. \$1,200,000 is expected to be received from the Colorado Department of Transportation for work related to relocating Conduit 153. An additional \$50,000 is projected from smaller jobs. Total 2000 reimbursements of \$791,000 were \$404,000 more than budgeted primarily due to the timing of Central Platte Valley work (\$367,000) and cement mortar lining of the Denver Botanical Gardens water mains (\$141,000).

#### . Interest on Investments

Denver Water temporarily invests designated balances in short-term, low-risk money market instruments. Interest on investments for 2001 is projected to be \$7,653,000. Actual 2000 interest of \$8,436,000 is \$1.9 million over the amount budgeted primarily due to more funds available for investments than anticipated.

#### . Other

These receipts consist of reimbursements for the relocation of mains and fire hydrants, proceeds from the sale of surplus assets, and minor items not included elsewhere. Other receipts are projected to be \$2,000,000 in 2001, based on historical trend after adjusting for unusual items. Actual 2000 receipts of \$1,087,000 are \$913,000 less than budgeted due to timing.

#### . Land Sales Account

Proceeds from the sale of surplus land are required to be used for water system projects as determined by the Board of Water Commissioners. Proceeds from the sale of surplus land are projected to be \$1,500,000 in 2001. (See page 106). Actual 2000 proceeds from surplus land of \$1,376,000 are \$1.3 million less than budgeted due to the budgeted 2000 sale of Fehringer Ranch property being delayed to 2001.

#### . Bond Proceeds

Denver Water engages in a bond-refunding program in which a maturing bond is replaced with a new bond that effectively extends the maturity of the old bond. This allows the average maturity of bonds used to finance a facility to more nearly approximate the useful life of the facility, which may be from 50 to 100 years. Bond proceeds for 2001 are projected at \$11,159,000. Actual 2000 bond proceeds of \$12,677,000 were \$23,000 less than budgeted.

# Comparison of Receipts 1997 - 2001 (Thousands of Dollars)

	1997 Actual		1998 Actual		1999 Actual		2000 Budget		2000 Actual		2001 Budget
Receipts:								_		· <del>-</del>	
Operating	\$ 123,005	\$	127,281	\$	126,160	\$	133,298	\$	151,490	\$	139,465
Non-Operating	2,796		3,510		3,294		2,917		3,315		3,200
Hydropower	1,536		1,510		1,631		1,878		2,108		2,030
System Development Charges	45,092	(1)	33,187	(2)	24,328		19,100		25,620		21,300
Participation	3,731		8,413		13,171	(3)	3,741		6,392		3,915
Reimbursements	131		168		371		387		791		1,637
Interest on Investments	4,255		6,877		6,213		6,535		8,436		7,653
Land Sales Account - Interest	193		340		363		334		325		363
Land Sales Account - Sales	4,808		1,956		4,691		2,700		1,376		1,500
Other	2,507		2,186		2,246		2,000	_	1,087	_	2,000
Subtotal Receipts	<b>\$</b> 188,054	\$	185,428	\$	182,468	\$	172,890	\$	200,940	\$	183,063
Bond Proceeds	19,644		0	= =	14,472		12,700	-	12,677	. –	11,159
Total Receipts	\$ 207,698	\$	185,428	\$	196,940	\$	185,590	\$_	213,617	\$_	194,222

#### FOOTNOTES:

- 1997 actual System Development Charges includes payment of \$22.9 million for SDCs by South Adams County Water and Sanitation District for delivery of 4,000 acre-feet of potable water under the terms of the Memorandum of Understanding dated December 19, 1997.
- (2) 1998 actual System Development Charges includes payment of \$12.5 million for SDCs by Public Service Co. of Colorado for delivery of 5,200 acre-feet of reuse water under terms of a Reuse Agreement dated December 16, 1997.
- (3) 1999 actual Participation includes payment of \$7.0 million from South Adams County Water and Sanitation District for development of 8,000 acre-feet of storage capacity under the terms of a water agreement dated November 30, 1998.
- (3) 1999 actual Participation includes payment of \$2.0 million from South Adams County Water and Sanitation District for increased pumping capacity at 56th Avenue Pump Station.

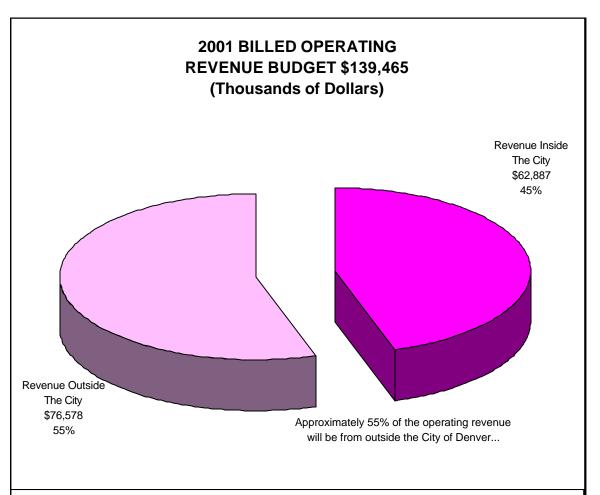
# Comparison of Operating and Non-Operating Receipts 1997 - 2001 (Thousands of Dollars)

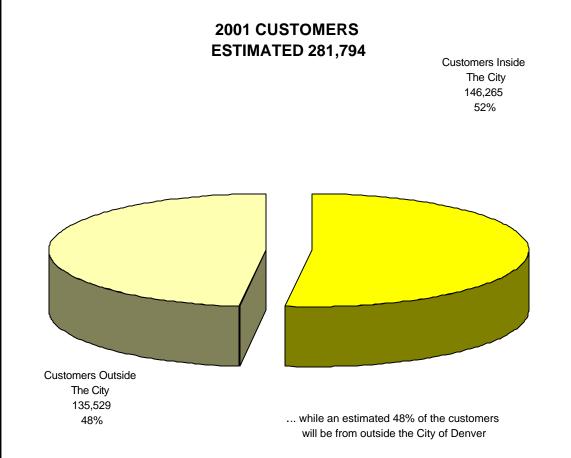
		1997 Actual		1998 Actual		1999 Actual		2000 Budget		2000 Actual		2001 Budget
Operating Receipts Billed Operating Revenue:	-		=		-		=		=		_	
Metered General	\$	79,644	\$	86,672	\$	86,151	\$	91,236	\$	102,225	\$	97,119
Private Fire Protection		500		601		623		621		642		611
Public Authority		5,657		5,842		5,889		7,319		6,895		7,222
Sales for Resale-Treated		26,474		27,740		27,630		28,108		33,834		28,177
Other Sales of Water-Raw		162		128		153		271		275		221
Sales for Resale-Raw		2,498		3,918		3,468		3,743		5,181		3,865
Other Operating Revenue	_	2,967	_	2,132	_	2,200	_	2,000	_	2,291	_	2,250
Total Billed Operating Revenue	\$	117,902	\$	127,033	\$	126,114	\$	133,298	\$	151,343	\$	139,465
Cash Flow Adjustment*	<u>-</u>	5,103	_	248	_	46	_	0	_	147	_	0
Total Operating Receipts	\$	123,005	\$	127,281	\$_	126,160	\$	133,298	\$	151,490	\$_	139,465
% Receipts to Billed Revenue		104.30%		100.20%		100.00%		100.00%		100.10%		100.00%

<sup>\*</sup> The Cash Flow Adjustment is the difference between amounts billed to customers and payments received due to the timing of billings and resulting receipts. The \$5.1 million adjustment for 1997 is due to changing from a bi-monthly billing system to daily billing at the beginning of 1997 and the City and County of Denver paying past due amounts.

#### **Non-Operating Receipts**

Merchandising, Jobbing & Contract Work	\$	1,318	\$	1,825	\$	1,429	\$	1,279	\$	1,674	\$	1,429
Canals, Ditches and Ranches		838		798		902		750		735		661
Sewer Billing Charges		566		569		600		609		599		847
Other Non-Operating		74		318		363		279		307		263
Total Non-Operating Receipts	<b>-</b> \$_	2,796	<b>\$</b> _	3,510	<b>-</b> \$_	3,294	<b>\$</b> _	2,917	\$_	3,315	\$_	3,200





#### **WATER RATES**

The Board of Water Commissioners is authorized by Section C4.22 of the Charter to set rates for water service. Since its inception, the Board has set rates at a level sufficient to service its debt and to meet its expenses of operation and maintenance. The Board has never required ad valorem taxes to meet its obligations.

Rate increases are implemented from time to time in order to offset the impact of inflation and other operating financial requirements.

#### Water Rate Levels

The Board continually reviews its structure of water rates, adjusting them as may be necessary to provide adequate levels of revenue. In view of the operational and capital needs of the system and the impact of inflation, the Board conducts ongoing rate studies to determine required rate levels.

On September 19, 2000, the Board adopted new rates to take effect for water bills dated on and after January 1, 2001. The new water rates are designed to increase revenue from water sales, under normal weather conditions, by 2.4%.

### **History of Rate Increases**

The following statistics show effective dates of past actions by the Board in setting adequate rates and the proposed incremental increases in revenues. During the period 1918 through 1958 there were several adjustments in rates, but the net effect was that rates in 1958 were unchanged compared to the rates in 1918.

Effective Date	Increase in Revenues
April 01, 1975	18.5%
April 16, 1976	20.0%
April 16, 1980	32.2%
February 01, 1982	12.0%
April 15, 1986	7.0%
April 15, 1987	5.0%
June 15, 1992	2.2%
June 01, 1993	4.0%
June 01, 1994	4.5%
January 01, 1995	8.4%
January 01, 1996	5.8%
January 01, 1997	4.5%
January 01, 1998	3.1%
January 04, 1999	0.54%
March 6, 2000	2.5%
January 1, 2001	2.4%

# History of Increases System Development Charges (First Implemented in 1973)

	Incremental Increase
July 1, 1973	100.0%
April 1, 1975	50.0%
April 16, 1976	50.0%
January 1, 1980	50.0%
February 1, 1982	50.0%
January 1, 1986	7.0%
January 1, 1998	5.0%
January 4, 1999	5.0%
January 1, 2001	9.0%

# **Water Rate Structure** (Effective January 1, 2001)

Customers are billed a service charge plus a consumption charge as follows:

RETAIL SERVICE CHARGE:

Bimonthly \$4.50 <u>Monthly</u> \$3.16

# RETAIL CONSUMPTION CHARGE (Bimonthly)

	Rate Per 1,000 Gallons							
Residential:		Outside City	Outside City					
Single Family	Inside City	Read and Bill	Total Service					
First 22,000 Gallons	\$ 1.48	\$ 1.82	\$ 2.26					
Next 38,000 Gallons	1.78	2.18	2.71					
All Over 60,000 Gallons	2.22	2.73	3.39					
Small Multi-Family with single meter								
First 30,000 Gallons	1.31	1.77	2.01					
Over 30,000 Gallons	1.57	2.12	2.41					
All Other Retail:								
Winter	1.28	1.61	1.88					
Summer	1.54	1.93	2.26					
WHOLESALE RATE OUTSIDE CITY ONL Consumption Charge:	<u>.Y</u>	Rate Per 1,000	) Gallons					
A.U. O		<b>A</b> 4 <b>A</b> 4						

All Consumption \$ 1.81

#### **Types of Service**

Water rates are based on three types of retail metered service: Inside City, Outside City Read and Bill, and Outside City Total Service. Inside City service refers to all water users inside Denver. Outside City Read and Bill service refers to areas outside the city where Denver Water is responsible for water delivery to a distributor and for reading meters and billing customers, while the distributor is responsible for operation and maintenance of the distribution system. Outside City Total Service refers to areas outside the city where Denver Water is responsible for water delivery, reading meters and billing customers, as well as operation and maintenance of the distribution system.

Denver Water also provides wholesale water service to Master Meter Distributors (water districts outside the city) that own and operate their own water system, perform their own meter reading and customer billing, and who purchase water on a wholesale basis for distribution to their respective retail customers. As of December 31, 1999, wholesale water district contracts accounted for 23.4% of total treated water consumption.

# **Residential Bimonthly Billings**

The table below indicates the estimated 2001 bimonthly billing for a single-family home with an annual consumption of 133,000 gallons per year for 3/4" metered service. It was prepared for comparison purposes only.

		Average Winter	Average Summer
Type of Service		Effective <u>January 1, 2001</u>	Effective <u>January 1, 2001</u>
Inside City Outside City (Read and Bill) Outside City (Total Service)		\$24.23 28.77 34.63	\$53.08 64.16 78.61
	Month January - February March - April May - June July - August September - October November - December		Consumption in  Gallons  12,000  13,000  22,000  40,000  31,000  15,000
	Total Annual Consump	tion	<u>133,000</u>

Denver Water does not depend on any one customer or any group of customers for a major portion of its revenue. As shown in the table below, the 25 largest customers accounted for only 4.9% of treated water sales revenue received in 2000.

# 2000 WATER CONSUMPTION AND REVENUE OF THE 25 LARGEST CUSTOMERS BY TYPE OF BUSINESS (NON-ACCRUAL BASIS) (1)

Consumption Business Type	Water (000 Gallons)	Revenue
Multi-location petroleum retailer Housing Authority Public Utility Public Recreation Agency Federal Government Beverage Company Manufacturer Multi-location Medical Provider Retail Grocer Property Management Medical Center Public Utility Manufacturer Snack Food Company Urban Redevelopment Authority Hotel School System Property Management Manufacturer	483,705 424,210 423,111 212,800 205,221 168,689 168,615 167,429 164,067 147,688 140,659 136,197 133,074 121,283 118,320 108,133 114,399 107,372 101,079	\$ 839,766 604,739 672,136 453,952 366,750 231,926 298,321 259,938 239,850 212,205 200,009 244,634 183,799 166,271 322,053 164,672 226,553 151,880 132,432
Property Management Property Management	98,008 97,965	181,718 212,921
Beverage Company Retail Grocer Public Utility Medical Center	97,236 92,235 91,110 <u>94,641</u>	133,353 141,330 160,611 <u>118,814</u>
Total - 25 Largest Customers	4,217,246	<u>\$ 6,920,633</u>
Total Sales of Treated Water	<u>81,183,956</u>	<u>\$143,596,580</u>
Percent of 25 Largest Customers to Total Sales of Treated Water	<u>5.19%</u>	4.82%

<sup>1)</sup> This schedule represents actual billings made for water during the year. The difference from amounts on an accrual basis is immaterial. In addition to the accounts listed, Denver Water provided 3,289,900 (000 gallons) to the City and County of Denver. Revenues from these sales were \$3,770,708.

### Survey of Comparative Water Bills

This table compares Denver's annual residential water bills with those of other independent suppliers in the Denver Metropolitan area for a representative residential customer based on usage of 133,000 gallons per year. This information is for comparison purposes only.

# ANNUAL RESIDENTIAL WATER CHARGES DENVER AND OTHER WATER DISTRIBUTORS IN THE DENVER METROPOLITAN AREA 2000

		Percent of
	Annual Water	Denver Inside City
<u>City</u>	Service Charge	Customer Charges
Indian Hills	\$2,120.50	909.11%
Broomfield Outside	760.22	325.92%
Louisville Outside	642.40	275.41%
Golden Outside	641.04	274.83%
Lafayette Outside	623.32	267.23%
Thornton Outside	605.81	259.73%
Northglenn Inside	594.15	254.73%
Colorado Springs Outside	522.86	224.16%
Morrison Inside	483.00	207.07%
Westminster Outside	446.06	191.24%
Arvada Outside	445.06	190.81%
Thornton Inside	403.39	172.94%
Glendale Inside	399.35	171.21%
Broomfield Inside	380.11	162.96%
Pueblo Outside	358.50	153.70%
Lakewood Inside	358.29	153.61%
Westminster Inside	356.80	152.97%
Boulder Outside	355.43	152.38%
Highlands Ranch	349.75	149.95%
Colorado Springs Inside	348.58	149.44%
Denver Outside	343.12	147.10%
Golden Inside	320.52	137.41%
Englewood Outside	318.74	136.65%
Louisville Inside	318.20	136.42%
Boulder Inside	317.15	135.97%
Lafayette Inside	311.66	133.62%
Arvada Inside	296.67	127.19%
Aurora Inside	286.31	122.75%
Glenwood Springs Inside	272.48	116.82%
Pueblo Inside	238.96	102.45%
Englewood Inside	233.25	100.00%
Denver Inside	232.24	99.57%

#### SYSTEM DEVELOPMENT CHARGES AND PARTICIPATION RECEIPTS

In addition to operating revenues and bond proceeds, funds are generated from (1) System Development Charges ("SDC's"), which are fees received for new connections to Denver Water's system, and (2) Participation Receipts, which are contributions paid by developers for the cost of specific facilities (e.g. distribution and transmission mains, pump stations and clear water reservoirs) to provide their developments with water service.

The System Development Charge ("SDC"), instituted in 1973, has provided a major source of funds for capital expenditures, although it is not legally restricted for such use. Since 1973, Denver Water has collected approximately \$318.0 million in SDCs. This charge applies to any applicant who is granted a license to take water through Denver Water's system or through a system deriving its supply from Denver Water. Such charge is assessed upon application for a new tap and is based upon the (1) gross square footage of the single family residential lot or, (2) the number of units in a multiplex building up to 5 units or, (3) the size of the connection required. (See table on the following page.)

Since 1974, developers have been required to participate in the front-end financing of facilities necessary to meet their specific needs. Total participation receipts of \$87.0 million have been collected since inception.

On September 19, 2000, the Denver Board of Water Commissioners approved an average nine percent (9%) increase for all treated water SDCs within Denver Water's Combined Service Area. Non-potable SDCs will increase an average of 13%.

# System Development Charges and Participation Receipts Collected (net of amounts refunded) 1973 - December 1999

	SDC's	Participation Receipts
1999	\$ 24,348,135	\$ 2,214,177
1998	19,779,946	7,179,698
1997	22,627,793	5,280,829
1996	15,137,276	2,913,102
1995	15,527,637	3,929,843
1994	13,535,659	2,881,783
1993	12,181,825	1,343,580
1992	10,920,330	1,198,805
1991	7,530,355	2,330,657
1990	6,615,100	1,838,736
1989	6,251,400	4,965,235
1988	6,084,580	3,067,731
1987	8,544,385	4,561,345
1986	11,916,810	4,973,340
1973-85	<u>137,556,792</u>	<u>38,673,619</u>
Total	\$ <u>318,558,023</u>	\$ <u>87,352,480</u>

The SDC receipts above may be used to retire debt.

# System Development Charge Schedule (Effective January 1, 2001)

# Single Family

	Inside Denver	Outside Denver		
Proposed	\$1,070 + \$0.26 per Sq. Ft.	\$1,500 + \$0.37 per Sq. Ft.		
Multifamily				
	Inside Denver	Outside Denver		

# All Other

\$4,290 + \$870 for each unit over 2 \$6,000 + \$1,225 for each unit over 2

r	$\overline{}$	_	٠	$\overline{}$	

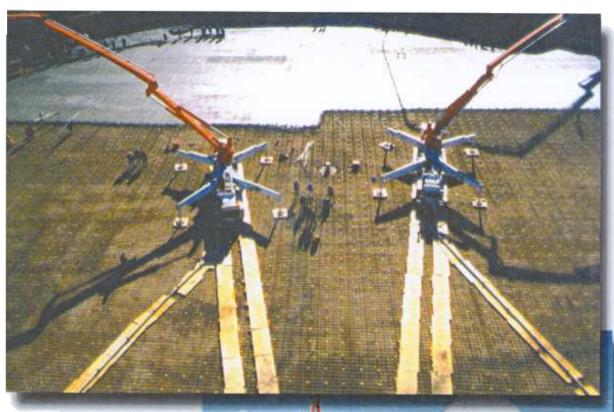
	rrealeu	
ltem	Inside Denver	Outside Denver
Treated Water		
Tap Size (\$/Tap)		
3/4	\$3,150	\$4,400
1	9,450	13,200
1 ½	18,900	26,400
2	28,350	39,600
3	69,300	96,800
4	122,850	171,600
6	214,200	299,200
8	283,500	396,000
10	362,250	506,000
12	441,000	616,000

Proposed

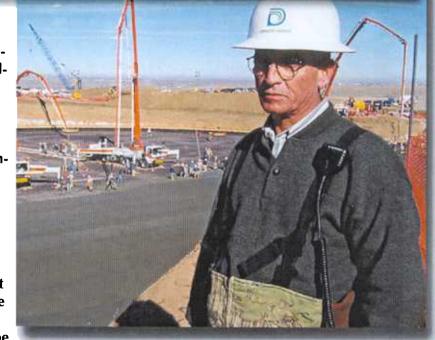
# Non-Potable

	Non-Polable		
ltem	Inside Denver	Outside Denver	
Non-Potable Water			
Tap Size (\$/Tap)			
3/4	\$1,725	\$2,400	
1	5,175	7,200	
1 ½	13,800	19,200	
2	22,425	31,200	
3	37,950	52,800	
4	56,925	79,200	
6	117,300	163,200	
8	151,800	211,200	
10	194,925	271,200	
12	277,725	386,400	

	Treated Water		Non-Potable Water	
Acre Foot Conversion (\$/AF)	Inside Denver	Outside Denver	Inside Denver	Outside Denver
Inside the Combined Service Area	6,850	9,565	3,725	5,200
Outside the Combined Service Area		9,900		5,200



**Resident engineer Victor** Sanchez, bottom photo, is the field supervisor for construction of the new 25-million-gallon underground reservoir at Foothills **Treatment Plant. Some** 275,000 cubic yards of earth were excavated beginning in June 2000 for the clearwater reservoir. The hole was dug 40 feet deep and 400 feet across. The floor's pour on Dec. 2 was the largest continuous placement of concrete west of the Mississippi River. The circular, post-tension tank will be the largest of its type in the Rocky Mountain region.



#### **Expenditure Budget By Program - Summary**

Programs Denver Water engages in specific activities to carry out Strategic and Integrated Resource Plan policies. These activities have been grouped into five broad categories or programs that follow the flow of water from raw water source to the customer's tap. Each program is further broken down into Operation and Maintenance and Capital expenditure components.

Raw Water Program - Provision of an adequate raw water supply. Includes collection and impounding reservoirs, collection systems, ditches and canals and raw water supply mains.

Treated Water Program - Treatment of water for delivery to customers. Includes treatment plants and the Water Quality Control Laboratory.

Delivery Program - Providing treated water to customers and distributors. Includes pumping stations, treated water reservoirs, transmission and distribution mains, fire hydrants, decentralization stations, conservation activities, meter reading and customer billing and assistance.

General Plant Program - Includes the West Side complex, administrative and meeting facilities, warehouses, yards and maintenance shops.

Successive Use Program - Includes studies, engineering and construction of successive use of water for non-potable purposes.

The programs have been further divided into expenditures for operation and maintenance activities and for capital projects. Total 2001 program budget expenditures of \$220,066,000 include \$82,059,000 for operation and maintenance; \$106,378,000 for new capital additions, replacements and improvements; and \$31,629,000 for debt service and related costs.

**Operation and** Denver Water experienced several unanticipated impacts on its operations over the past few years that resulted in substantial expenditures in cleanup and repair.

The Buffalo Creek fire occurred on May 18, 1996. It was followed by extensive flooding in June and July that caused tons of ash, silt, charred limbs and trash to be deposited in Strontia Springs Reservoir. Cleanup of Strontia Springs Reservoir and the Spring Creek area was completed by the end of 1996. The cost of cleanup and changes to treatment operations required to take the reservoir out of service totaled \$363,000 for 1996 and an additional \$324,000 for 1997. Sedimentation studies during 1998 and 1999 were approximately \$19,000 and \$27,000 respectively. These studies have continued into 2000 for an additional \$40,000. Loss of hydropower revenue from Strontia Springs and Hillcrest was approximately \$80,000 for 1996 and \$46,000 for 1997.

In June 1996, a three-inch bypass line broke at the Roberts Tunnel hydropower facility, flooding the structure. Cleanup and repair costs were \$790,000 for 1996 and \$746,000 for 1997. Estimated lost hydropower revenue was \$217,000 for 1996, plus an additional \$224,000 for 1997 and \$13,000 for 1998.

A major break on Conduit 94 was experienced in May 1997, and repairs were completed soon after. Cleanup, repair and claims totaled \$698,000 by the end of 1997 with an additional \$334,000 for 1998. The costs for the failure investigation were \$42,000 for 1997, \$153,000 for 1998 and \$323,000 for 1999 and an approximated \$89,000 for 2000.

The High Meadows fire in June, 2000 resulted in expenditures of approximately \$91,000 related for fire containment.

Conduit 55 experienced a major break in November 1998, resulting in expenditures of \$43,000 through the end of the year. Repair costs and failure investigation costs continuing into 1999 were \$1.8 million. All of the 48" pre-stressed concrete pipe (approximately 3 miles) will be replaced with 54" steel pipe in a capital project. \$1.7 million was expended for replacement during 1999, with an additional \$3.8 million in 2000 plus \$19,000 for the ongoing failure investigation.

In August of 1999, a landslide damaged Siphon #4 at the South Boulder Canal resulting in repairs totaling \$255,000.

**Major Capital** Project Impact On Operations

Regulations promulgated under the Safe Drinking Water Act together with normal aging of facilities built in the 1920's and 1930's have had a significant impact on the cost of water treatment operations. \$14.7 million was spent on capital upgrades and additions needed to meet Federal and State water quality and environmental safety regulations during 2000. An additional \$9.3 million is budgeted for 2001.

Problems concerning solids handling and disposal at the Foothills, Marston and Moffat water treatment plants continue to increase capital and operating costs. Enlargement and construction of landfill facilities will impact the cost of operation. Operating costs were \$384,000 during 2000 for operation. The 2001 budget includes \$588,000 for this work.

Redevelopment of Stapleton Airport and Lowry Air Force Base also is expected to have substantial impact on future capital and operation and maintenance budgets. Stapleton Airport was closed in 1995 upon the opening of the new Denver International Airport. Lowry was decommissioned and the former base made available for redevelopment in September 1994. Costs were incurred for main and hydrant installations, improvements and replacements during 2000 including a service worker II for flushing and maintenance duties at both areas. Future capital and operation and maintenance expenditure projections depend on the development schedule for these areas.

Demand-side management is a term used by Public Service Company in which rebates are given when a facility can reduce power consumption. During 1996 and 1997, natural gas engines were installed at Marston and Kendrick pump stations and variable frequency drive motors were installed at 56<sup>th</sup> Avenue and Highlands pump stations at a cost of \$1.6 million, resulting in a 1997 Public Service Company rebate totaling \$1.2 million. The 2000 capital budget included \$1.9 million for design of natural gas engines at Lonetree and Highlands Pump stations, and design and construction at Belleview and Green Mountain Pump Stations. However, with Denver Water's new negotiated fuel prices with Public Service Company and their decision not to include Denver Water in the new demand side management program (Bid 2000), it is more economically attractive to design and construct diesel engine generator sets at all four locations. It is expected that the diesel engine generator sets along with the new fuel costs will reduce annual operating costs by approximately \$500,000. In addition, Denver Water has the opportunity to generate income from running the new diesel engines to reduce power load on Public Service's system during peak demand periods. This issue still requires negotiations and an agreement. After the change in strategy from natural gas engines to diesel units, the construction phase is not scheduled to begin until December of 2000. Most of the construction budget will be needed in 2001.

The 2001 capital budget includes \$19.4 million for the construction of a treatment plant to receive and treat effluent from the Metro Sewer Plant to serve non-potable customers. Pumping, storage and a dual distribution system are also included in this project. Phases I and II consisting of 6,600 acre feet of supply and 30 millions of gallons per day of treatment will start construction in 2001 with completion scheduled for 2008. The ten-year operation and maintenance plan projects that an additional 20 employees will be needed to operate the treatment plant when it starts operation in 2003. Total operation and maintenance costs in 2003 are projected at \$1.5 million.

Capital Capital projects are financed through a mixture of Participation receipts, System

Financing Development Charges and Reimbursements for relocations of water facilities as a result of highway and other construction, debt, reserves and other sources. See Section 2, Receipts Forecast, pages 43-45 and Crosswalk of 2001 budgeted Receipts related to Capital and Operating Expenditures by type of expenditures on pages 24 for additional information.

Capital Capital expenditures for 2000 totaled \$82,997,000, \$807,000 more than budgeted. This increase results from unbudgeted Gravel Pit and Leyden Gulch property purchases of \$15.1 and \$1.6 million, respectively, partially offset by underruns due to changes in scheduling for gravel pit storage related construction (\$2.3 million), Gross Dam Outlet Works gates of (\$1.9 million), Reuse Plant Construction (\$4.0 million), natural gas engine installations at Lonetree and Highlands (\$1.9 million), Colorow Reservoir basin 1 construction (\$1.2 million), construction of a new building to house the carpenter and paint shops, vehicle control center, car wash, maintenance office and other activities (\$2.0 million) and a new GIS computer system (\$1.8 million). All other variances totaled \$1.6 million.

Total 2001 budgeted capital expenditures are \$106,378,000. Approximately \$26.8 million of these expenditures are shared with water distributors and others in the metropolitan area through participation contracts, System Development Charges and reimbursements.

A list of major 2001 capital projects is shown on pages 62-63. Additional detail information may be found on pages 64 through 76.

## MAJOR 2001 CAPITAL PROJECTS (Thousands of Dollars)

2001 Capital W.P.Budget PROGRAM: RAW WATER Integrated Resource Plan Projects (1): Gravel Pit Storage Below Metro Wastewater – Develop storage using reclaimed gravel pits downstream from Metro Sewer outfall to recapture water released to supplement Metro Reach flows in average and above average years. In dry years, recapture reusable return flows when no exchange potential exists at South Platte Intakes and release water in late spring/early summer when exchange potential does exist for new yield and to augment the Reuse Project supply requirements. 2,226 Integrated Resource Project-Northwest Tier - This project is exploring cooperative opportunities with water providers in the Northwest Metro area to solve Denver's supply shortage while also meeting some of the water needs for northwest water providers. During 2001, an alternative feasibility study will be conducted which will evaluate and prioritize the supply alternatives available to the Department on the north end of the system. The costs in the 2001 Capital Budget include \$1.0 million towards the total purchases of 1,400 acre-feet of storage capacity in Consolidated Mutual's Fortune Reservoir. 1,808 10 smaller Integrated Resource Plan Projects **Total Integrated Resource Projects & Gravel Pit Projects** PROGRAM: SUCCESSIVE USE Reuse Project - Includes design and initial construction of Phase I of a treatment plant to receive and treat effluent from the Metro Sewer Plant to serve reuse water customers. Pumping, storage facilities and a distribution system are included in this project. Project started January, 1999 with construction beginning January, 2001. Completion date is anticipated for December, 2003. 19,411 PROGRAM: WATER TREATMENT Foothills Plant Disinfection Improvements & Reservoir - The disinfection portion of this project is required to comply with water quality regulations and also plant safety equipment to comply with the Uniform Fire Code. The point of chlorine application in the process will be changed in an effort to reduce disinfection by-products. The project includes the design and construction of a 25 MG reservoir. Construction started May, 2000. Completion date for disinfection construction is 2002 and 2001 for the reservoir. 14,625 **Marston Modifications** – Complete upgrade and renovation of Filter Plant 1 at Marston. The renovation will add 65 MGD to plant capacity. Construction is anticipated to start March, 2001. Completion date anticipated for 2003. 8,085 PROGRAM: DELIVERY Conduit 94 Upgrade - Replace 2,300 foot section of PCCP pipe in Conduit 94.

Construction anticipated to start February, 2001. Completion date anticipated for June,

1,452

2001.

#### PROGRAM: DELIVERY (Continued)

<b>Automated Meter Reading</b> – Installation of equipment for implementation of automated meter reading throughout the entire Denver Water service area. The unit cost per meter is about \$200. The rate of installation is about 50,000 devices per year. Installation begins March 1, 2001 with completion of 205,000 installations by June 30, 2005.	8,908
<b>Conduit 153</b> – Installation of a 30" main in Monaco from Quincy to Union. Construction is anticipated to start August, 2001. Completion date anticipated for January, 2002.	1,120
<b>Conduit 138 Phase III Thru Fehringer Ranch –</b> Construction anticipated to start April, 2001. Completion date anticipated for August, 2001.	1,422
<b>Central Platte Valley Alternate Source Facilities –</b> Install a limited distribution system and pump station to serve parks and open space with raw water in the Central Platte Valley from Gates Crescent Park on the south to Rockmont Park on the north. This program will provide alternative raw water sources for irrigation instead of treated water.	1,448
<b>Main improvements and replacements –</b> Includes installation of new mains for looping and other systems improvements and replacement of deteriorated, obsolete and leaking mains under 24" in diameter. Continuous program.	4,164
PROGRAM: GENERAL PLANT	
<b>West Side Complex –</b> Construct Building #3 to house Carpenter and Paint shops, Hazardous Materials, VCC, Car Wash and Maintenance Office with storage. Project will be done to maintain the efficiency, appearance, and general working conditions of Denver Water's buildings and yards and satisfy the provisions of the agreement between Denver Water and the EPA regarding certain facilities listed above. Construction started October, 2000. Completion is anticipated for July, 2001.	3,896
<b>Motor Vehicles &amp; Heavy Equipment –</b> Two new & fifty-two replacement vehicles; four new and seventeen replacement heavy equipment purchases.	2,279
<b>New Computer Systems and Hardware –</b> Centralized computer hardware is budgeted at \$512,000, centralized software \$272,000, PCs and related equipment at \$919,000, area network at \$175,000 and capitalized computer systems at \$2,983,000 including \$1.9 million for the GIS system.	4,861
ALL OTHER CAPITAL EXPENDITURES	18,595
TOTAL 2001 CAPITAL BEFORE SUPPORTING ACTIVITIES (2)	\$ 95,042
SUPPORTING ACTIVITIES	9,884
TOTAL 2001 CAPITAL WORK PLAN BUDGET*	\$ <u>104,926</u>
	·

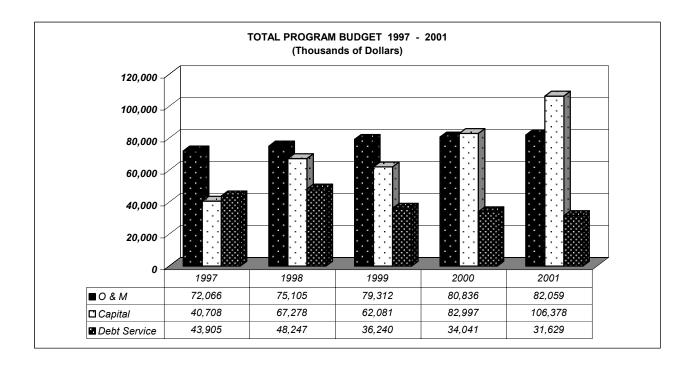
- (1) Integrated Resource Planning (IRP) A tool for looking ahead using environmental engineering, social, financial and economic considerations. Includes using the same criteria to evaluate both supply and demand options while involving customers and other stakeholders in the process.
- (2) Note: There are 263 projects in the 2001 Capital Work Plan. The 15 projects shown constitute .81% of the budget for total projects before the addition of supporting activities to Capital.

## Program Elements

Each of the major programs has been subdivided into smaller categories of activities called program elements. A detailed breakdown of each program into its program elements can be found on pages 66 to 76.

Operation and maintenance expenditures have continued to rise due to increasing costs for water treatment, conduit, main and service line repairs and environmental compliance related activities. The increases in the Raw Water Program in 1997 and 1998 are primarily due to cleanup and repair work necessitated by the 1996 Buffalo Creek fire and floods, flooding of the Roberts Tunnel hydropower facility in 1996 with completion of repair and clean up in 1998. Repairs to Roberts Tunnel emergency gate and tunnel lining began in 1998 and were completed in 1999. Repairs to Siphon #4 on the South Boulder Canal resulting from damage caused by a landslide impacted 1999. Water Treatment program increases are generally due to increased chemical costs and additional federal mandates. Delivery program increases include repairs and cleanup for Conduit 94 in 1997, 1998 and 1999 and Conduit 55 repairs and cleanup 1998 and 1999. The 2001 increase reflects expenditures for electronic meter reading components to be used for new meter installation and/or replacement meters. Explanation of major changes in expenditures is provided at the end of the narrative for each program. The table on page 65 provides more detail information.

The graph below shows the historical trend of capital, operation and maintenance and debt service expenditures. The high level of capital expenditures in 2001 reflects \$19.4 million for design and construction of the Reuse Plant project, \$14.6 million for the Foothills Treatment Plant Disinfection facility and \$8.1 million for Marston Treatment Plant upgrades to comply with Federal and State regulations, \$8.9 million for Automated Meter Reading and \$3.9 million for construction of a new building at the West Side Complex to house the carpenter and paint shops, vehicle control center, maintenance office and other activities.



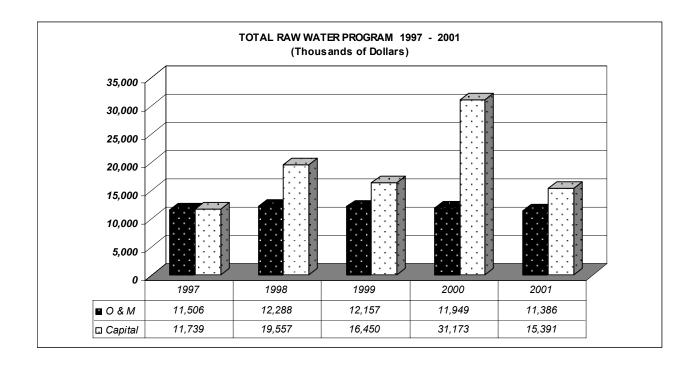
#### Program Expenditures Summary 1997 - 2001 (Thousands of Dollars)

Program Elements	_	1997 Actual		1998 Actual	_	1999 Actual	_	2000 Budget	_	2000 Actual	_	2001 Budget
Operation and Maintenance Programs: Raw Water	\$	11,506	\$	12,288	\$	12,157	\$	10,211	\$	11,949	\$	11,386
Successive Use Water Treatment		12 15,654		6 15,741		4 16,349		17 18,281		7 17,198		0 17,952
Delivery		36,162		37,450		40,093		41,234		40,291		40,727
General Plant	_	8,732	_	9,620	_	10,709	-	10,553	_	11,391	_	11,994
Total Operation & Maintenance Programs	\$	72,066	\$	75,105	\$	79,312	\$	80,296	\$	80,836	\$	82,059
Less: Allocated												
Supporting Activities	\$_	32,445	\$_	36,165	\$_	38,629	\$	39,747	\$_	40,017	\$_	39,887
Total O & M Before												
Supporting Activities	\$_	39,621	\$_	38,940	\$_	40,683	\$	40,549	\$_	40,819	<b>\$</b> _	42,172
Capital Programs:												
Raw Water	\$	11,739	\$	19,557	\$	16,450	\$	22,123	\$	31,173	\$	15,391
Successive Use		393		999		603		6,172		1,987		19,801
Water Treatment		4,716		14,799		14,778		15,699		16,078		26,197
Delivery		16,220		21,637		21,665		24,435		25,860		31,359
General Plant		7,640		10,286		8,585		13,761		7,899		13,630
Major Capital Project Timing	_		-		-		-		_		_	
Total Capital Programs	\$	40,708	\$	67,278	\$	62,081	\$	82,190	\$	82,997	\$	106,378
Less: Allocated												
Supporting Activities	\$_	8,093	\$_	8,860	\$_	9,669	\$	9,579	\$_	9,310	\$_	9,884
Total Capital Before												
Supporting Activities	\$_	32,615	\$_	58,418	\$_	52,412	\$	72,611	\$_	73,687	<b>\$</b> _	96,494
Subtotal Capital and												
O&M Before Supporting Activities	\$	72,236	\$	97,358	\$	93,095	\$	113,160	\$	114,506	\$	138,666
Subtotal Supporting Activities		10 ====	_	4=		40.55-		10.55		46.55-		40
Allocated to Capital and O&M	\$	40,538	\$	45,025	\$	48,298	\$	49,326	\$	49,327	\$	49,771
Debt Service and Related Costs	\$	43,905	\$	48,247	\$	36,240	\$	34,454	\$	34,041	\$	31,629
Total Expenditures	\$	156,679	\$	190,630	\$	177,633	\$	196,940	\$_	197,874	\$	220,066

Raw Water This program contains all of the expenditures related to the operation and maintenance of raw water facilities from source to treatment such as collection systems, storage reservoirs, intakes, wells, ditches and canals. It also includes capital expenditures related to hydropower development, water rights acquisitions, ongoing raw water development, replacements and improvements to existing facilities and related activities.

Major 2001 capital expenditures include \$4.7 million for Integrated Resource Plan projects. Preparing gravel pits for water storage is budgeted at \$2.2 million. Cooperative projects for the northwest tier, Fortune and Leyden are budgeted at \$1.0 million and \$802,000, respectively. All other IRP projects total \$742,000. Other Raw Water projects include installing a new slide gate at the inlet to the outlet works at Gross Reservoir to protect upstream control of the outlet works budgeted at \$738,000. Total expenditures budgeted in 2001 for the Raw Water Program are \$26,777,000, comprised of \$11,386,000 for operation and maintenance and \$15,391,000 for capital.

The graph below shows the historical trend of these expenditures. The large increase for 1998 capital is due to the purchase of the Moffat Water Tunnel for \$7.0 million and gravel pit storage for \$8.1 million. The largest item for 1999 is the unbudgeted \$8.6 million purchase of the Leyden Reservoir property. The largest 2000 increases were due to unbudgeted gravel pit and Leyden Gulch property of \$15.0 million and \$2.9 million, respectively. Operation and maintenance expenditures reflect the 1997, and 1998 clean-up and repair work resulting from the Buffalo Creek fire and floods in 1996, flooding of the Roberts Tunnel Hydropower facility in 1996, with completion of repairs and cleanup in 1998, repairs to the Roberts Tunnel emergency gate and tunnel lining which began in 1998 and were completed in 1999 and the 1999 repairs to Siphon #4 on the South Boulder Canal caused by a landslide. The table on page 67 provides more detail information.



#### Program: Raw Water 1997 - 2001 (Thousands of Dollars)

Program Elements	<del>-</del>	1997 Actual	_	1998 Actual		1999 Actual		2000 Budget	_	2000 Actual		2001 Budget
Operation and Maintenance:												
Supervision and Engineering Storage Reservoirs Intakes, Wells, Ditches & Canals Supply Mains & Collection Systems Power Generation Resource Development, Planning & Ctrl Investigation & Development Source Watershed Protection	\$	402 1,519 793 1,156 1,134 409 590	\$	201 2,142 1,207 1,091 576 577 310	\$	217 2,223 762 1,441 498 511 294 46	\$	141 1,645 757 879 420 659 151 214	\$	217 \$ 2,108 840 1,035 445 594 426 120	\$	154 1,792 830 953 451 679 405 212
Subtotal	\$	6,003	\$	6,109	\$	5,992	\$	4,866	\$	5,785	\$	5,476
Supporting Activities	_	5,503	_	6,179	_	6,165	_	5,345	_	6,164		5,910
Total Operation & Maintenance	\$_	11,506	\$_	12,288	\$_	12,157	\$_	10,211	\$_	11,949	\$	11,386
Capital:												
Water Rights Hydropower Development -	\$	606	\$	908	\$	1,716	\$	814	\$	1,569	\$	957
Gross Dam		663		192		81		262		129		170
Williams fork		0		0		45		711		161		137
Conduit 20 Marston Bypass		4,638		0		0		0		0		0
Antero Reservoir - New Outlet		1,946		111		0		0		0		0
Moffat Water Tunnel Purchase		0		7,010		0		0		0		0
Gravel Pit Storage (IRP Project) Integrated Resource Planning		0 0		8,120 367		1,749 8,946		2,773 2,667		15,550 3,926		2,226 2,250
Gross ResOutlet Works Gates		0		0		0,940		1,893		3,920		738
Marston-Constr Low Level Outlet Works		0		0		0		1,120		390		200
Other Raw Water Improvements Raw Water Modifications		1,100		957		1,322		3,849		3,909		2,884
and Replacements	_	935		831	_	861	_	4,745	_	3,540	_	3,037
Subtotal	\$	9,888	\$	18,496	\$	14,720	\$	18,834	\$	29,174	\$	12,599
Supporting Activities	_	1,851	_	1,061	_	1,730	_	3,289	_	1,999	_	2,792
Total Capital	\$_	11,739	\$_	19,557	\$_	16,450	\$_	22,123	\$_	31,173	\$	15,391
Total Raw Water Expenditures	\$_	23,245	\$_	31,845	\$_	28,607	\$_	32,334	\$_	43,122	\$	26,777

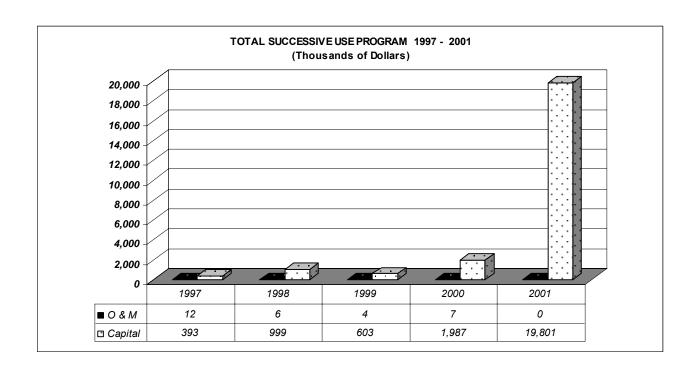
**Successive** This program initially contained all expenditures relating to the operation of the **Use**one-million-gallon-per-day Reuse Demonstration Plant and analytical and health effects studies. Studies demonstrating this new water treatment process, which allows for the immediate purification and reuse of processed wastewater, were essentially completed in 1991 and the plant closed. The operation and maintenance amounts shown are for minor expenses to maintain the building.

This program also includes the design, engineering and construction costs for facilities necessary to supply Denver International Airport with reuse water for irrigation purposes and additional projects in the northeast service area in the future. The improvements were substantially completed in 1994. Capital expenditures following 1994 are for ongoing improvements and modifications.

Design, engineering and construction of a treatment plant to receive and treat effluent from the Metro Sewer Plant is also included in this program. The facility will serve reuse water to customers for irrigation, cooling systems and similar purposes. Phase I design of the project began in 1998. The 2001 budget includes \$19.8 million including indirects for phases I and II construction starting in 2001 with project completion scheduled for 2008.

Total 2001 expenditures for the Successive Use Program are budgeted at \$19,801,000, all of which is capital.

The graph below shows the design of the new reuse treatment plant from 1998 to 2000 with construction starting in 2001. The table on page 69 provides more detail information.

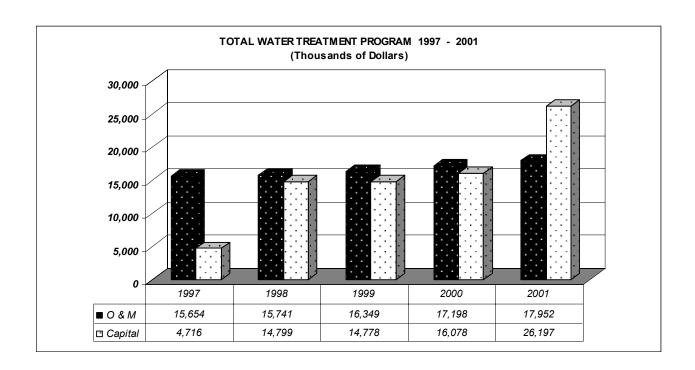


#### Program: Successive Use 1997 - 2001 (Thousands of Dollars)

Program Elements	_	1997 Actual	_	1998 Actual	_	1999 Actual	_	2000 Budget	_	2000 Actual	_	2001 Budget
Operation and Maintenance:												
Reuse Demonstration Plant Operation	\$	12	\$	6	\$	4	\$	6	\$	3	\$	0
Subtotal	\$	12	\$	6	\$	4	\$	6	\$	3	\$	0
Supporting Activities		0	_	0	_	0	_	11	_	4	_	0
Total Operation & Maintenance	\$_	12	\$_	6	\$_	4	\$_	17	\$_	7	\$_	0
Capital:												
Airport Non-Potable Facilities Reuse Plant for Non-Potable water	\$_	300 1	\$_	6 899	\$	4 496	\$_	0 5,857	\$	44 1,763	\$_	5 19,411
Subtotal	\$	301	\$	905	\$	500	\$	5,857	\$	1,807	\$	19,416
Supporting Activities	_	92	_	94	_	103	_	315	_	180	_	385
Total Capital	\$_	393	\$_	999	\$_	603	\$_	6,172	\$_	1,987	\$_	19,801
Total Reuse Expenditures	\$_	405	\$_	1,005	\$_	607	\$_	6,189	\$_	1,994	\$_	19,801

Water This program contains all expenditures related to the treatment of raw water, including operation and maintenance of the Moffat, Marston and Foothills water treatment plants and Quality Control Laboratory, as well as capital expenditures for improvements, modifications and replacements to existing treatment facilities. Major 2001 capital expenditures include \$14.6 million for a disinfection facility at the Foothills Treatment Plant. Design and construction of upgrades and improvements to Filter Building 1 at Marston Treatment Plant are budgeted at \$8.1 million. Approximately \$24.0 million, or 91% of the 2001 capital water treatment expenditures, are related to meeting Federal, State and local regulations. Total 2001 expenditures for the Water Treatment Program are budgeted at \$44,149,000, comprised of \$17,952,000 for operation and maintenance and \$26,197,000 for capital.

The graph below shows the historical trend of these expenditures. The high level of capital expenditures from 1998 to 2000 reflect construction of disinfection facilities and other upgrades needed to meet Federal and State water quality regulations at Marston, Moffat and Foothills. The table on page 71 provides more detail information.



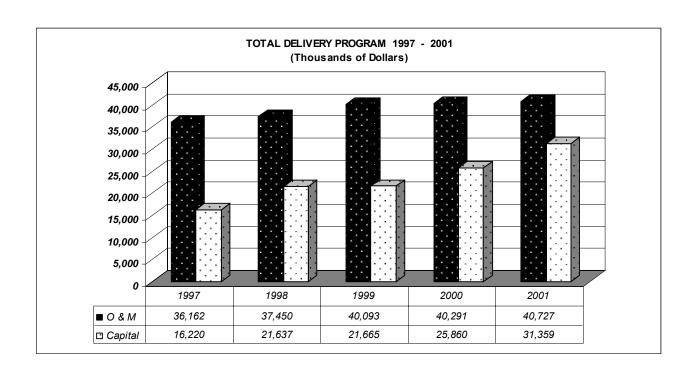
#### Program: Water Treatment 1997 - 2001 (Thousands of Dollars)

Program Elements	_	1997 Actual	_	1998 Actual	_	1999 Actual	-	2000 Budget	_	2000 Actual		2001 Budget
Operation and Maintenance:												
Supervision and Engineering Treatment Plants Water Quality Laboratory	\$ _	395 8,174 1,300	\$ _	190 7,710 1,329	<b>\$</b>	188 7,902 1,354	\$	317 8,439 1,538	\$_	235 8,092 1,369	\$ _	299 8,207 1,572
Subtotal	\$	9,869	\$	9,229	\$	9,444	\$	10,294	\$	9,696	\$	10,078
Supporting Activities	_	5,785	_	6,512	_	6,905	_	7,987	_	7,502	_	7,874
Total Operation & Maintenance	\$_	15,654	\$_	15,741	\$_	16,349	\$_	18,281	\$_	17,198	\$_	17,952
Capital:												
Moffat Modifications & Improvements Moffat Disinfection Improvements Marston Modifications & Improvements Marston Solids Handling Marston Disinfection Improvements Foothills Modifications & Improvements Foothills Solids Handling Foothills Disinfection Improvements Other Treatment Improvements	\$	705 2 103 1,462 140 1,308 13 0 69	\$	45 1,351 274 4,328 5,407 806 154 74 1,138	\$	6 5,288 538 427 5,002 249 4 1,279 796	\$ -	167 185 2,957 0 0 89 283 8,467 2,597	\$	69 1,709 2,557 12 582 248 0 8,808 1,523	<b>\$</b>	25 0 8,120 0 0 120 0 14,625 2,292
Subtotal	\$	3,802	\$	13,577	\$	13,589	\$	14,745	\$	15,508	\$	25,182
Supporting Activities	_	914	_	1,222	_	1,189	_	954	_	570		1,015
Total Capital	\$_	4,716	\$_	14,799	\$_	14,778	\$_	15,699	\$_	16,078	\$_	26,197
Total Water Treatment Expenditures	\$ <sub>_</sub>	20,370	\$_	30,540	\$_	31,127	\$_	33,980	\$_	33,276	\$	44,149

**Delivery** This program contains all expenditures relating to the delivery of water from the treatment plants to customers, including such items as operation and maintenance of pumping facilities and treated water storage facilities, maintenance of transmission and distribution mains, service lines, fire hydrants, conservation activities, customer services, billing and collection.

Major 2001 capital expenditures include \$8.9 million for Automated Meter Reading, \$1.5 million for upgrading of Conduit 94, \$1.4 million for construction of Conduit 138, Phase III through Fehringer Ranch and \$4.2 million for main improvements and replacements. Total 2001 budgeted Delivery Program expenditures are \$72,086,000, comprised of \$40,727,000 for operation and maintenance and \$31,359,000 for capital. \$3.9 million of the capital expenditures will be reimbursed through participation receipts. (See page 44, Participation Receipts.)

The graph below shows the historical trend of these expenditures. The 1998 and 1999 expenditures reflect construction of the Chatfield Pump Station low-side additions and a 5.0 millions of gallons per day reservoir. Year 2000 reflects construction of Colorow Reservoir and higher levels of main improvements and replacements for Denver International Airport and the Lowry Redevelopment than expected. The 2001 budget increase is primarily due to the Automatic Meter Reading project and alternate source facilities for the Central Platte Valley project. The table on page 73 provides more detail information



#### Program: Delivery 1997 - 2001 (Thousands of Dollars)

Program Elements	_	1997 Actual	_	1998 Actual	_	1999 Actual	_	2000 Budget	· <u>-</u>	2000 Actual	_	2001 Budget
Operation and Maintenance:												
Supervision and Engineering Pumping and Storage Mains Service Lines Fire Hydrants Conservation Customer Services Sprinkler & Domestic Service	\$	2,728 3,058 3,508 519 597 1,503 5,832	\$	3,127 3,160 3,234 225 510 1,142 5,792	\$	3,021 3,031 4,014 198 493 1,475 5,855	\$	2,932 3,294 3,886 182 456 1,604 6,438	\$	2,959 3,378 3,843 181 499 1,230 5,772	\$	2,798 3,653 3,759 143 433 1,520 6,959
Connections, Decentralization Stations	-	944	_	996	-	1,222	-	903	_	1,098	_	1,066
Subtotal	\$	18,689	\$	18,186	\$	19,309	\$	19,695	\$	18,960	\$	20,331
Supporting Activities	_	17,473	_	19,264	-	20,784	_	21,539	. <u>-</u>	21,331	_	20,396
Total Operation & Maintenance Capital:	\$_	36,162	\$_	37,450	\$_	40,093	\$_	41,234	\$_	40,291	\$_	40,727
<i>Ο</i> αριιαι.												
Pumping and Storage: 56th Ave - 30 MGD Booster Pump Chatfield Pump Station Chatfield Reservoir - 5.0MGD Colorow Reservoir Diesel Engines/Var Frequency Mtrs Other Pumping & Storage Total Pumping and Storage	\$ \$	711 81 78 9 1,339 514 2,732		0 1,986 2,004 65 41 548 4,644	_	0 2,737 437 116 568 421 4,279	\$ \$	0 0 0 3,257 1,953 847 6,057	\$	0 290 4 2,068 43 729 3,134	<b>\$</b>	0 0 0 527 718 1,293 2,538
Conduit Construction Automated Meter Reading Transmission & Distribution Conservation:	\$	1,192 81 6,915	\$	2,715 3 8,773	\$	858 3 10,743	\$	1,335 968 10,533	\$	524 1,608 13,880	\$	3,164 8,908 9,599
Xeriscaping & Sources for Parks	-	786	_	342	-	203	-	1,248	_	764	_	1,847
Subtotal	\$	11,706	\$	16,477	\$	16,086	\$	20,141	\$	19,910	\$	26,056
Supporting Activities	_	4,514	_	5,160	-	5,579	_	4,294	_	5,950	_	5,303
Total Capital	\$_	16,220	\$_	21,637	\$_	21,665	\$_	24,435	\$_	25,860	\$_	31,359
Total Delivery Expenditures	\$_	52,382	\$_	59,087	\$	61,758	\$	65,669	\$	66,151	\$_	72,086

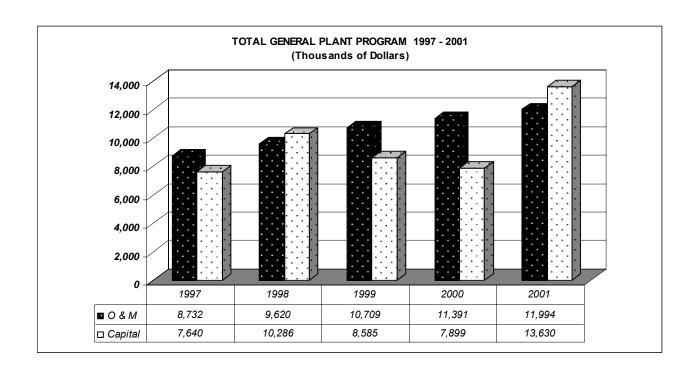
General Plant

and maintenance and \$13,630,000 for capital.

This program contains all expenditures related to the operation and maintenance, construction and acquisition of general plant and equipment, including the Administration Building, West Side buildings and grounds, vehicles, heavy equipment, telemetering and computer-related items. Major 2001 capital expenditures include \$3.9 million for a new building to house the carpenter and paint shops, hazardous materials. vehicle control center, carwash and maintenance office at the West Side Complex, \$2.3 million for purchase of motor vehicles and heavy equipment, and \$4.9 million for mainframe, personal

The graph below shows the historical trend of these expenditures. The increase in capital expenditures for 1997 and 1998 reflects construction of a new building for Transmission and Distribution personnel and new computer systems. 1998, 1999 and 2001 include higher expenditures for the purchase of additional new computer systems and hardware. 2001 is substantially higher than prior years due to construction of a new building to house the paint and carpenter shops, vehicle control center, maintenance office and other activities. The table on page 75 provides more detail information.

computers, network equipment, new facilities mapping and other computer systems. Total 2001 expenditures budgeted for General Plant is \$25,624,000, comprised of \$11,994,000 for operation



#### Program: General Plant 1997 - 2001 (Thousands of Dollars)

Program Elements	_	1997 Actual	_	1998 Actual	_	1999 Actual	_	2000 Budget	_	2000 Actual	_	2001 Budget
Operation and Maintenance:												
West Side Complex Kassler Center Motor Vehicle & Equipment Radio System & Telemetering Environmental Compliance Tool Repair & Other Small Items	\$	1,439 132 1,751 1,256 329 141	\$	1,498 132 1,817 1,215 442 306	\$	1,465 1 2,081 1,313 505 569	\$	1,652 12 1,824 1,240 567 393	\$	1,412 5 2,328 1,489 612 529	\$	1,636 50 2,213 1,386 518 484
Subtotal	\$	5,048	\$	5,410	\$	5,934	\$	5,688	\$	6,375	\$	6,287
Supporting Activities	_	3,684	_	4,210	_	4,775	-	4,865	_	5,016	_	5,707
Total Operation & Maintenance	\$_	8,732	\$_	9,620	\$_	10,709	\$_	10,553	\$_	11,391	\$_	11,994
Capital:												
West Side Complex Kassler Center Decentralization Stations Motor Vehicles & Heavy Equip Computer Systems & Equipment Communications, Office &	\$	1,004 25 0 1,866 2,763	\$	1,232 47 0 2,316 4,221	\$	1,019 78 2 1,750 3,773	\$	3,315 357 17 2,450 5,570	\$	1,299 81 20 2,199 2,789	\$	4,461 145 7 2,279 4,861
Specialized Equipment Control Instrumentation & Telemetering Other locations	_	849 356 55	_	956 124 67	_	820 17 58	_	1,098 149 78	_	758 92 50	_	1,158 123 207
Subtotal	\$	6,918	\$	8,963	\$	7,517	\$	13,034	\$	7,288	\$	13,241
Supporting Activities	_	722	_	1,323	_	1,068	_	727	_	611	_	389
Total Capital	\$_	7,640	\$_	10,286	\$_	8,585	\$_	13,761	\$_	7,899	\$_	13,630
Total General Plant Expenditures	\$_	16,372	\$_	19,906	\$_	19,294	\$_	24,314	\$_	19,290	\$_	25,624

#### **Supporting Activities**

Each of the major programs contains a program element called supporting activities. This is an allocation of general and administrative expenditures that are not directly related to a particular program. These supporting activities can be characterized as indirect expenditures. A detailed listing of all of the supporting activities and their subsequent allocation to capital and operation and maintenance categories, along with further allocation to each of the major programs, is contained below.

# Program Element: Supporting Activities 2001 (Thousands of Dollars)

		Total 2001	Allocate	ed To
	-	Budget	O & M	Capital
Supporting Activities:				
Administration	\$	21,746 \$	17,427 \$	4,319
Employee Benefits		25,957	20,802	5,155
Warehouse - Yards		817	655	162
Maintenance Shops		988	792	196
Gen. Liability & Other Ins.		478	383	95
Other*	-	-215	-172	-43
Total Supporting Activities	\$	49,771 \$	39,887 \$	9,884

<sup>\*</sup> Includes Stores Issue and other adjustments including refunds to customers.

## Summary of Allocation Of Supporting Activities to Programs

	_	Raw Water		Successiv Use	_	Water Treatment	Delivery	_	General Plant	_	2001 Total
Operation & Maintenance	\$	5,910	\$	0	\$	7,874	\$ 20,396	\$	5,707	\$	39,887
Capital	_	2,792	•	385		1,015	5,303	-	389	_	9,884
Total	\$	8,702	\$	385	\$	8,889	\$ 25,699	\$	6,096	\$	49,771



Eleven mobile pumpers, top photo, delivered 12.5 million pounds of concrete for the floor of the 25-million-gallon underground reservoir at Foothills Treatment Plant on Dec. 2, 2000. The \$12.5 million clearwater reservoir is part of a \$25 million improvements project at Foothills. The reservoir is scheduled for completion in 2002. Construction inspectors Jim Warden and Dick Prosser, in the bottom photo by engineer Jessica Barbier, were part of Denver Water's crew during the one-day pour.



#### **Expenditure Budget by Type of Expenditure - Summary**

**Type of**In this section, total 2001 budgeted expenditures of \$220,066,000 have been placed into categories that describe what these expenditures purchase. Each category accumulates expenditures for the particular type of purchase regardless of program or whether the expenditure is for operation and maintenance or for capital.

Page 80 of this section provides summary data for expenditures by type. Pages 81 through 93 provide detailed information on the number of employees and history of divisional explanations. The following is a brief description of each of the line items appearing on page 80.

#### **Gross Payroll**

Budgeted 2001 gross payroll is \$54,596,000, an increase of \$2.9 million over 2000 actual gross payroll. The increase reflects an overall pay increase of 2.7% that went into effect January 2001.

The 2001 proposed regular and introductory number of employees of 1,060.1 is 14.0 more than authorized for 2000. This is 48.9 positions less than the high point of 1,109 authorized in 1991. Seven of the new positions are in the Information Technology section replacing six consultants and one project employee, five new positions are in the Engineering Division to assist with the large increase in construction projects and two new positions related to the new Reuse Plant are in the Operations and Maintenance Division. Please see page 84 for a complete list of all positions additions and deletions.

A summarized organization chart that shows reporting relationships can be found on page 85. A comparison of authorized 2000 and 2001 number of employees for regular, introductory, temporary, project, casual and part-time employees is shown on pages 82 to 83.

#### **Employee Benefits**

Employee benefits for 2001 are budgeted at \$18,133,000, an increase of \$1,170,000 over actual 2000. The increase is substantially due to an increase of \$690,000 for the Defined Benefit Retirement plan, reflecting the 2.7% payroll increase, \$358,000 for Health Insurance and \$258,000 for Social Security, partially offset by a decrease for Workers Compensation.

#### **Materials and Supplies**

Budgeted 2001 materials and supplies are \$19,013,000; an increase of \$1.9 million from 2000. This is substantially due to Materials for the Automated Meter Reading project. 2001 will be the first full year for retrofitting the water meters with the electronic reading equipment. Capital projects completed in 2000 and adjustments related to purchase and issuance of warehouse materials partially offset that increase.

#### **Outside Services**

Budgeted outside services for 2001 total \$32,993,000, including utilities and power for pumping, professional (consultant), and other services.

The 2001 budget includes \$4,500,000 for utilities and pumping power an increase of \$115,000 from 2000. This was substantially due to increased pumping power needed in 2000 due to increased consumption resulting from warmer and dryer weather than expected.

The professional services budget of \$11,762,000 is a \$1.7 million increase over 2000. The increase is substantially for design and engineering of the new Reuse Treatment plant and distribution facilities (\$3.0 million for 2001, \$820,000 for 2000), and installation of new GIS computer systems (\$1.8 million for 2001, \$622,000 for 2000). It includes the costs of consulting services such as design engineering, auditing, outside legal services and other professional consultants.

Other services budgeted at \$16,731,000 for 2001 includes such items as computer software and maintenance, employee training, books and subscriptions, postage, equipment rental and contracted maintenance. The \$622,000 increase over 2000 is primarily due to installation costs for the Automated Meter Reading project.

#### **General Equipment**

Purchases of equipment during 2001 are budgeted at \$4,436,000, mostly for purchasing vehicles, heavy equipment and computer equipment. This is a \$1.9 million increase over 2000 expenditures. \$1.3 million is for mass storage, servers, replacement pcs, and other related computer equipment. \$170,000 of the increase is for motor vehicles and heavy equipment replacements. \$231,000 of the increase is for upgrading the telephone system.

#### **Construction Contract Payments**

This category includes payments for construction work and major material purchases under contract, purchase of water rights and acquisition of rights-of-way. These payments, budgeted at \$58,363,000 for 2001, are substantially due to Reuse Plant construction (16.0 million), disinfection facility at Foothills treatment plant (\$13.8 million), Marston treatment plant improvements (\$7.0 million), construction of Conduit 138, Phase III (\$1.4 million) and Conduit 94 upgrade (\$1.4 million) and construction of a building at Westside Complex (\$3.8 million). Integrated Resource Plan projects and purchase of additional gravel pits totaled \$3.5 million.

#### Refunds

Refunds consist primarily of System Development Charges and customer refunds. The 2001 budget projects refunds of \$330,000, a decrease of \$57,000 from 2000 actual.

#### **Debt Service**

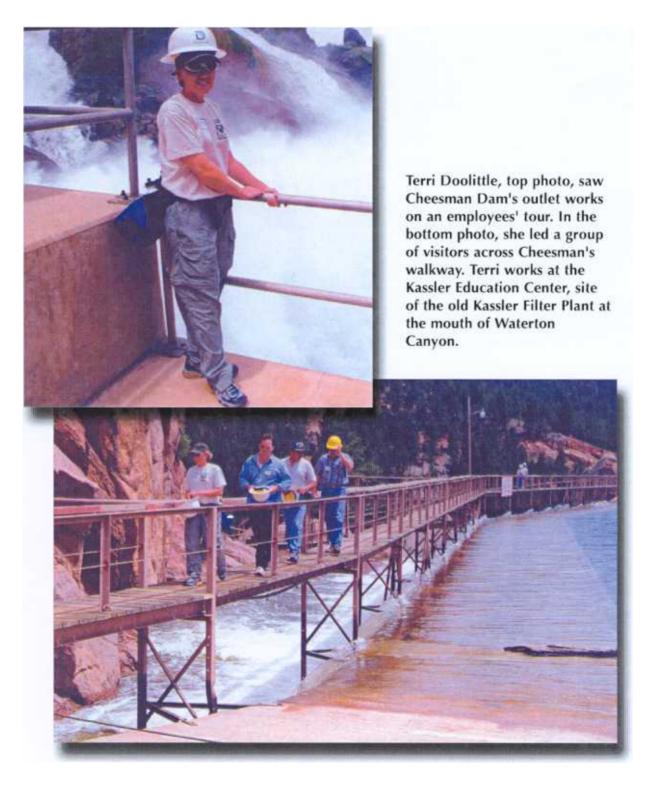
Debt Service includes principal and interest payments for General Obligation and Refunding Bonds, Certificates of Participation for the Marston Pretreatment Facilities, Moffat improvements, 64th Avenue Pump Station projects and the Wolford Mountain Reservoir capital lease. Debt Service for 2001 is budgeted to be \$31,559,000. See section 6, pages 99-104 for additional information.

Total principal maturing and interest due in 2001 is as follows:

	<u>Principal</u>	<u>Interest</u>	<u>Total</u>
General Obligation & Refunding Bonds	\$ 12,000,000	\$ 11,052,000	\$ 23,052,000
Certificates of Participation	3,005,000	2,502,000	5,507,000
Wolford Mountain Reservoir Capital Leas	se <u>836,000</u>	2,164,000	3,000,000
Total Debt Service	<u>\$ 15,841,000</u>	<u>\$ 15,718,000</u>	\$ 31,559,000

#### Summary of Expenditures by Type of Expenditure 1997 - 2001 (Thousands of Dollars)

	_	1997 Actual	_	1998 Actual	_	1999 Actual	_	2000 Budget	 2000 Actual	_	2001 Budget
Gross Payroll	\$	48,554	\$	50,098	\$	50,759	\$	51,984	\$ 51,716	\$	54,596
Employee Benefits		13,951		15,621		16,983		16,796	16,963		18,133
Materials and Supplies		11,065		12,370		13,735		12,347	17,071		19,013
Outside Services:											
Utilities & Pumping Power	\$	3,913	\$	4,127	\$	3,887	\$	4,493	\$ 4,385	\$	4,500
Professional Services		4,187		5,731		8,529		15,811	10,063		11,762
Other Services	_	12,296	-	13,673	_	13,986	_	15,213	 16,109	_	16,731
Subtotal Outside Services	\$	20,396	\$	23,531	\$	26,402	\$	35,517	\$ 30,557	\$	32,993
General Equipment		3,542		4,408		2,768		4,546	2,538		4,436
Construction Contract Payments		14,429		35,849		29,825		40,491	45,622		58,380
Refunds		474		345		1,081		232	387		330
Debt Service		43,838		48,102		36,171		34,383	34,026		31,559
Other		430		306		(91)		644	(1,006)		626
Total Expenditures	\$_	156,679	\$	190,630	\$_	177,633	\$	196,940	\$ 197,874	\$_	220,066



#### **Denver Water Organization**

Denver Water is under the complete charge and control of the Board of Water Commissioners. The five Water Commissioners are appointed by the Mayor of Denver to six-year terms. The Manager of Denver Water is appointed by the Board and is "discretionary." In general, "discretionary" means that the Manager holds "executive discretion" and serves solely at the pleasure of the Board. The Manager appoints the Division Directors, who manage the divisions. The Directors also are discretionary and report directly to the Manager.

Organizationally, Denver Water is divided into seven divisions, which are then further defined into sections. The 2001 budgeted Table of Organizations shown on pages 82 and 83. Divisional summaries for the number of employees and expenditures by division are shown on pages 86 through 92.

## Regular and Introductory Employees 1997 - 2001

Division	1997	1998	1999	2000	2000	2001
	<u>Actual</u>	<u>Actual</u>	<u>Actua</u> l	<u>Budget</u>	<u>Actual</u>	<u>Budget</u>
Manager & Staff* Public Affairs Legal Finance Engineering Planning Administration** Operation & Maintenance	36.8	79.8	84.8	87.0	86.0	95.0
	153.8	153.8	154.4	161.4	145.1	159.4
	11.4	13.5	11.5	13.6	13.5	13.6
	101.0	59.0	57.0	60.0	56.0	60.0
	122.6	126.0	127.0	129.0	127.0	134.0
	41.3	40.4	40.4	44.1	42.4	44.1
	0.0	0.0	0.0	0.0	0.0	0.0
	523.0	529.0	527.5	551.0	535.5	554.0
Totals  Authorized	989.9	1001.5	1002.6	1,046.1	1,005.5	1,060.1
	1,032.2	1,036.2	1,044.3	1,046.1	1,046.1	1,060.1
Difference	-42.3	-34.7	-41.7	N/A	-40.6	N/A

<sup>\*</sup>The Information Services Section was transferred from the Finance Division to the Manager & Staff Division in June, 1998.

## 2001 Budgeted Table of Organization (Comparison with 2000)

Regular-Introductory Staff

				<del></del>		2001	
Divisions/Sections	2000 Actual	2000 T. O.	2001 T. O.	Change in T.O.s	Temp- orary	Proj Temp	Casual Part- Time
Manager & Staff Division						<del></del>	
Manager and Staff	13.0	13.0	13.0	_	-	_	-
Information Technology	48.0	48.0	55.0	7.0	_	-	_
Human Resources	25.0	26.0	27.0	1.0		3.0	1.0
Total Manager & Staff Division	86.0	87.0	95.0	8.0	0.0	3.0	1.0
Public Affairs Division							
Director of Public Affairs	7.0	8.0	7.0	-1.0	-	-	-
Community Relations	4.5	4.8	4.8	0.0	-	-	1.0
Conservation	6.0	7.0	7.0	0.0	-	-	-
Reproduction Services	4.0	3.0	4.0	1.0	-	-	-
Central Services	3.0	3.0	3.0	0.0	-	-	-
Customer Services - Office	24.0	25.0	28.0	3.0	-	-	-
Customer Services - Field	84.0	92.0	92.0	0.0	-	-	-
Sales Administration	12.6	18.6	13.6	-5.0			
Total Public Affairs	145.1	161.4	159.4	-2.0	0.0	0.0	1.0
Legal Division	13.5	13.6	13.6	0.0	0.0	0.0	2.0
Finance Division							
Director of Finance	8.0	8.0	8.0	0.0	-	1.0	-
Treasury Operations	5.0	5.0	5.0	0.0	-	-	-
Fiscal Planning & Performance	4.0	5.0	5.0	0.0	-	-	-
Purchasing	8.0	8.0	8.0	0.0	-	-	-
Accounting	17.0	19.0	19.0	0.0	-	-	1.0
Rate Administration	2.0	2.0	2.0	0.0	-	-	-
Electronic Records & Data Mgt.	12.0	13.0	13.0	0.0	2.0	1.0	
Total Finance	56.0	60.0	60.0	0.0	2.0	2.0	1.0
Engineering Division							
Administration	8.0	8.0	8.0	0.0	-		-
Programs & Projects	35.0	34.0	37.0	3.0	3.0	-	-
Survey	25.0	26.0	26.0	0.0	2.0	-	6.0
Distribution	38.0	40.0	40.0	0.0	-	-	6.0
Construction Management	21.0	21.0	23.0	2.0	2.0		
Total Engineering	127.0	129.0	134.0	5.0	7.0	0.0	12.0

## 2001 Budgeted Table of Organization (Comparison with 2000)

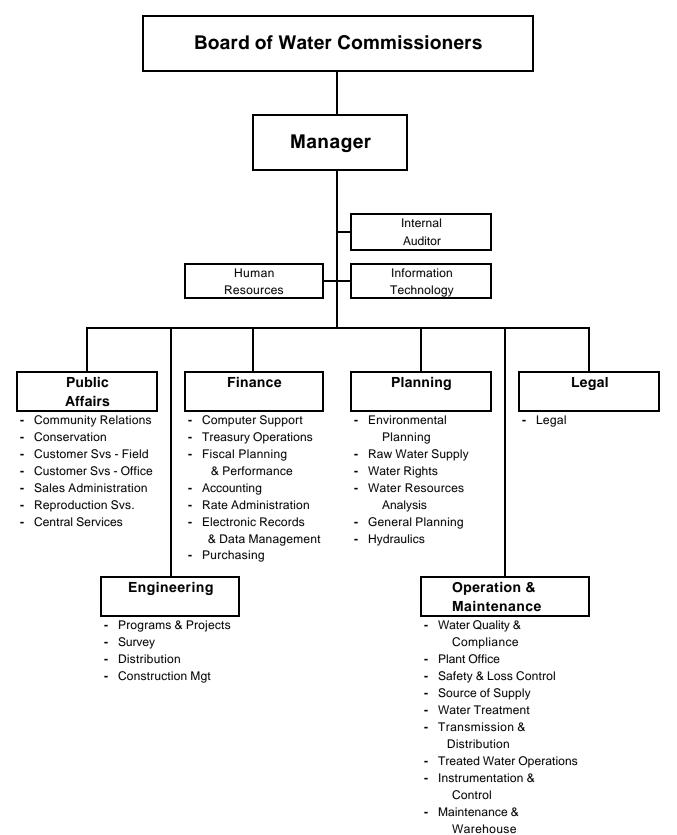
Regular-Introductory Staff

						2001	
				Change			Casual
	2000	2000	2001	in	Temp-	Proj	Part-
Divisions/Sections	Actual	T. O.	T. O.	T.O.s	orary	Temp	Time
Planning Division							
Director of Planning	3.0	3.5	3.5	0.0	-	-	-
Environmental Planning	4.4	4.6	4.6	0.0	-	-	-
Raw Water Supply	6.0	6.0	6.0	0.0	-	-	1.0
Water Rights	7.0	8.0	8.0	0.0	-	-	-
Water Resources Analysis	10.0	10.0	10.0	0.0	1.0	-	-
General Planning	5.0	5.0	5.0	0.0	-	-	-
Hydraulics	7.0	7.0	7.0	0.0			7.0
Total Planning	42.4	44.1	44.1	0.0	1.0	0.0	8.0
Operation and Maintenance Divis							
Water Quality & Compliance	30.5	31.0	31.0	0.0	1.0	-	1.0
Safety and Loss Control	12.0	12.0	13.0	1.0	-	-	-
Plant Office	5.0	5.0	5.0	0.0	-	-	-
Source of Supply	60.0	61.0	61.0	0.0	19.0	2.0	-
Water Treatment	66.0	68.0	70.0	2.0	-	-	-
Transmission & Distribution	162.0	166.0	166.0	0.0	-	-	8.0
Treated Water Operations	59.0	61.0	60.0	-1.0	-	-	2.0
Instrumentation & Control Systems	16.0	16.0	16.0	0.0	-	-	-
Maintenance and Warehouse	125.0	131.0	132.0	1.0			8.0
Total Operation & Maintenance	535.5	551.0	554.0	3.0	20.0	2.0	19.0
Total All Divisions	1,005.5	1,046.1	1,060.1	14.0	30.0	7.0	44.0

### 2001 - 2000 Budgeted Tables of Organization Changes

2001 - 2000 Budgeted Tables of Organization Changes	Net
Divisions/Positions	Change
Manager and Staff Division	Change
Data Base Administrator (Information Technology) - NEW	1.0
Enterprise Applications Architect (Information Technology) - NEW	1.0
Quality Assurance Specialists (Information Technology) - NEW	2.0
Telecommunications Technician (Information Technology) - NEW	1.0
Business Systems Developers (Information Technology) - NEW	2.0
Administrative Assistant II (Human Resources) - NEW	1.0
Nurse (Human Resources - Clinic) - Regular Part-time - NEW	0.5
Nurse (Human Resources - Clinic) - Full-time to Part-time Regular	-0.5
Transe (Haman Resources Chino) Tan time to Fait time Regular	8.0
Public Affairs Division	0.0
Community Affairs Specialist II (Community Relations) - Regular Part-time to Regular Full-time	0.4
Administrative Assistant II (Community Relations) - Regular Full-time to Regular Part-time	-0.4
Customer Representative I (Customer Svs Office) - NEW Regular Part-time	0.5
Customer Representative I (Customer Svs Office) - NEW Regular Part-time	0.5
Customer Representative I (Customer Svs Office) - NEW	1.0
Administrative Assistant II (Customer Svs Office) - NEW	1.0
·	-1.0
Plan Review Coordinator (Sales Administration) - DELETE	
Administrative Assistant (Sales Administration) - NEW Regular Part-time	0.6
Cashier (Sales Administration - Cashiering) - DELETE	-1.0
Assistant Cashier (Sales Administration - Cashiering) - DELETE	-1.0
Teller (Sales Administration - Cashiering) - DELETE	-1.0
Administrative Assistant I (Sales Administration - Cashiering) - DELETE	-1.0
Administrative Assistant I (Sales Administration - Cashiering) - DELETE Regular Part-time	-0.6
	-2.0
Legal Division	
No change in positions	0.0
Finance Division	
No change in positions	0.0
	0.0
Engineering Division	
Engineering Specialist II (Programs and Projects) - NEW	1.0
Engineer V (Programs and Projects) - NEW	1.0
Engineer I (Programs and Projects) - NEW	1.0
Construction Specialist II (Construction Management) - NEW	1.0
Construction Inspector I (Construction Management) - NEW	1.0
,	5.0
Planning Division	
No change in positions	0.0
	0.0
Operation and Maintenance Division	
Instrument Technician (Safety & Loss control) - NEW	1.0
Plant Supervisor (Reuse Plant) - NEW	1.0
Assistant Plant Supervisor (Reuse Plant) - NEW	1.0
Leak Technician (Leak Detection) - DELETE	-1.0
Administrative Assistant II (Warehouse) - DELETE	-1.0 -1.0
Foreman (AutoGarage/Heavy Equip. Shop) - NEW	1.0
Mechanic (Maintenance - Mechanical Shop) - NEW	1.0
Medianio (Maintenance Medianical Onop) NEW	3.0
Total Position Changes	14.0
Total i Ostavii Olialiyes	14.0

### 2001 Denver Water Summary Table of Organization



#### Manager and Staff Division Summary

#### **Activities**

This Division includes the Manager as Chief Executive for Denver Water. The Manager is also Secretary to the Board of Water Commissioners and custodian of all records. The six Division Directors report directly to the Manager. This Division also includes the Human Resources Section, Information Technology Section, and the Internal Auditing function. Human Resources is responsible for administering all aspects of Denver Water's employment, training, and compensation systems. Human Resources maintains Denver Water's Personnel Policies, is custodian of personnel records, administers the risk management, health promotion, disability management, and workers compensation programs. Human Resources is also responsible for investigating employee complaints and administering programs related to women and minority owned businesses. The Information Technology Section is responsible for electronic communication, information systems, acquisition and maintenance of central computers and computer networks, information system management, purchase and support of personal computers, printers, and related equipment.

#### **Key 2001 Objectives**

- 1. Work to maintain existing water supply sources to serve Denver and contract service areas. Work to enhance supply options in order to serve the build-out of Denver and contract service areas. Cooperate with other regional water providers to better enable them to supply water to their customers, and to enhance the supply to Denver.
- 2. Maintain or improve existing relationships with water providers and distributors in the metropolitan area and with water utilities and providers elsewhere in the state.
- 3. Monitor environmental and regulatory developments on the national scene, and implement policy and operational changes where necessary to assure that Denver Water remains in compliance with all applicable laws.
- 4. Insure that the Water Department is managed in a cost effective, efficient and customer-friendly manner.
- 5. Insure that the human resources of Denver Water are hired, managed and developed in a manner that contributes to the effective and efficient operations of the Department and that reflects the diversity of the community in which we live.
- 6. Maintain all information systems so that information is provided in a timely and accurate fashion.
- 7. Install and maintain information system hardware and software for financial, geographic information, facility management, accounting, warehousing and purchasing, and customer information systems, and insure that such systems are adequately maintained and upgraded as necessary.
- 8. Connect remote sites to the central data systems.
- 9. Maintain the computer and network infrastructure to support the growing volume of data traffic.
- 10. Maintain and enhance computer security as needed to meet Denver Water's business objectives.
- 11. Improve operational efficiencies and reduce costs by deploying technology solutions.

#### Regular & Introductory Employees (At End of Year)

	1997	1998	1999	2000	2000	2001
Section	Actual	Actual	Actual	Budget	Actual	Budget
Manager and Staff	14.0	14.0	13.0	13.0	13.0	13.0
Human Resources*	22.8	22.0	25.0	26.0	25.0	27.0
Information Services**	0.0	43.8	46.8	48.0	48.0	55.0
Total	36.8	79.8	84.8	87.0	86.0	95.0

<sup>\*</sup> Health Clinic and Wellness Services transferred to Manager and Staff Division, Human Resources Section, due to reorganization of Administration Division, in February 1997, and includes four employees.

	1997	1998	1999	2000	2000	2001
	Actual	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 3,624	5,949	6,289	6,218	6,310	7,130
Employee Benefits	5,337	6,885	7,722	6,996	8,270	8,414
Materials	39	841	1,182	761	1,600	821
Services	1,741	6,890	7,646	10,279	7,931	8,560
Equipment	21	1,452	611	1,707	39	1,674
Refunds	0	0	1	0	1	0
Other	62	28	71	70	13	40
Total	\$ 10,824	22,045	23,522	26,031	24,164	26,639

<sup>\*\*</sup>Information Services transferred to Manager and Staff division from the Finance Division in June 1998.

#### **Public Affairs Division**

#### **Activities**

The Public Affairs Division facilitates relationships with issues, persons and entities outside of Denver Water. In that capacity, it responds to customer concerns and manages customer relations, maintains cooperative relationships with Denver City administration and governmental agencies whose sphere of operation affect Denver Water. They coordinate the administration of distributor contracts and facilitate Denver Water's relations with its various publics. Their responsibilities also include customer billing, cash handling, meter reading and maintenance, water conservation, plan review, facility locates, and public relations activities, operation of a print and graphics shop, and Denver Water's internal and external mail services.

#### **Key 2001 Objectives**

- 1. Begin automation of meter reading process
- 2. Acceptance of South Platte Protection Plan by U. S. Forest Service
- 3. Kickoff customer participation in internet bill presentation and payment

#### Regular & Introductory Employees (At End of Year)

	1997	1998	1999	2000	2000	2001
Section	Actual	Actual	Actual	Budget	Actual	Budget
Director of Public Affairs	8.0	8.0	8.0	8.0	7.0	7.0
Community Relations	4.2	4.2	4.8	4.8	4.5	4.8
Conservation	6.0	7.0	7.0	7.0	6.0	7.0
Customer Services	112.0	112.0	113.0	117.0	108.0	120.0
Sales Administration**	18.6	17.6	15.6	18.6	12.6	13.6
Reproduction Services*	2.0	2.0	3.0	3.0	4.0	4.0
Central Services*	3.0	3.0	3.0	3.0	3.0	3.0
Total	153.8	153.8	154.4	161.4	145.1	159.4

<sup>\*</sup>Transferred to Public Affairs due to reorganization of Administration Division, February 1997

		1997	1998	1999	2000	2000	2001
		Actual	Actual	Actual	Budget	Actual	Budget
Payroll	\$	5,773	6,087	6,126	6,274	6,002	6,235
Materials		635	732	857	1172	1,953	8134
Services		1,866	1,711	1,969	3389	2,092	5095
Equipment		132	179	117	52	12	20
Contract Payments		0	0	0	0	0	40
Refunds		188	167	1,009	166	208	228
Other		1	0	12	0		0
<b>-</b>	_		0.070	40.000		40.007	
Total	\$	8,595	8,876	10,090	11,053	10,267	19,752

<sup>\*\*</sup> The cashiering function was closed April 2000.

#### **Legal Division Summary**

#### **Activities**

The Legal Division represents and gives legal advice to the Board of Water Commissioners, the Manager and the various Divisions of Denver Water and handles all of its litigation. The types of litigation include water rights cases and diligence proceedings, administrative proceedings before State and Federal agencies, contract, civil rights and negligence cases, property suits and condemnations, and actions to recover Board charges and damages for injury to Board property and rights. In addition, the Legal Division represents Board interests in administrative hearings and appeals within Denver Water relating to personnel problems and customer complaints, reviews and advises upon matters of pending legislation, and prepares and reviews contract documents of all kinds.

#### **Key 2001 Objectives**

- 1. Respond to evolving challenges to the yield and operating flexibility of Denver Water's system, including challenges presented by various permitting processes and water court proceedings.
- 2. Improve personnel-related practices and policies, including benefits, risk management, corrective action and medical issues.
- 3. Examine methods of protecting the urban reach of the South Platte River, including water court proceedings, water delivery, water quality protections and intergovernmental agreements.

#### Regular & Introductory Employees (At End of Year)

Regular & Introductory	1997	1998	1999	2000	2000	2001
Section	Actual	Actual	Actual	Budget	Actual	Budget
Legal	11.4	13.5	11.5	13.6	12.9	13.6
Total	11 4	13.5	11.5	13.6	13.5	13.6

	1997	1998	1999	2000	2000	2001
	Actual	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 747	804	878	890	861	887
Materials	6	6	8	8	10	7
Services	257	597	1,206	753	1,446	910
Equipment	0	0	0	0	0	0
Other	403	379	439	550	261	550
Total	\$ 1,413	1,786	2,531	2,201	2,578	2,354

#### Finance Division Summary

#### **Activities**

The Finance Division is responsible for the management and budgeting of Denver Water's financial resources, including acting as the disbursing authority for the Manager and electronic document management. Major functional areas include accounting, treasury, long range financial planning, budgeting, performance measurement, water rate administration, purchasing and electronic records and data management.

#### **Key 2001 Objectives**

- 1. Work with all divisions to control expense levels.
- 2. Maintain financial stability.
- 3. Perform annual development and review of financial plan, rates and annual budget.
- 4. Investigate methods to improve electronic business functions.
- 5. Update system development charges.
- 6. Advise the Board, as trustee of the Department's retirement plan, on the plan's performance issues and redesign materials presented to trustees.

#### Regular & Introductory Employees (At End of Year)

	1997	1998	1999	2000	2000	2001
Section	Actual	Actual	Actual	Budget	Actual	Budget
Director*	8.0	7.0	8.0	8.0	8.0	8.0
Treasury Operations	5.0	5.0	5.0	5.0	5.0	5.0
Fiscal Planning & Performance	5.0	5.0	5.0	5.0	4.0	5.0
Accounting	20.0	20.0	18.0	19.0	17.0	19.0
Rate Administration	2.0	2.0	1.0	2.0	2.0	2.0
Information Technology**	41.0	0.0	0.0	0.0	0.0	0.0
Electronic Records & Data Mgt*	13.0	13.0	12.0	13.0	12.0	13.0
Purchasing	7.0	7.0	8.0	8.0	8.0	8.0
Total _	101.0	59.0	57.0	60.0	56.0	60.0

<sup>\*</sup>Director of Finance increased by two employees when Purchasing and ERDM functions were transferred to the Finance Division in February 1997, decreased by one employee when the Information Technology function was transferred to Manager and Staff Division in June 1998 and increased by one employee in 1999 when the PC Support function was transferred from the Accounting section to the Director of Finance in 1999.

	1997	1998	1999	2000	2000	2001
	Actual	Actual*	Actual	Budget	Actual	Budget
Payroll	\$ 5,347	2,976	2,848	2,969	2,932	3,102
Employee Benefits	8,614	8,736	9,261	9,800	8,693	9,719
Materials	859	115	293	435	432	444
Services	3,714	551	601	709	655	861
Equipment	1,329	167	16	17	10	15
Refunds	284	177	68	66	160	102
Debt Service	43,838	48,102	36,171	34,383	34,026	31,559
Other	17	34	37	24	48	36
Total	\$ 64,002	60,858	49,295	48,403	46,956	45,838

<sup>\*</sup>Does not include Information Services, which transferred to Manager and Staff division in 1998.

<sup>\*\*</sup>Information Technology function transferred to the Manager and Staff Division in June 1998.

#### **Engineering Division Summary**

#### **Activities**

The Engineering Division is responsible for the design, construction, survey and related engineering aspects of physical additions, improvements and maintenance for the raw and treated water system. Engineering disciplines and related functions include civil, structural, construction, administration, electrical, mechanical, hydraulic, and dam safety. Recreation and property management activities are also assigned to Engineering. These include easement acquisitions and licensing activities for properties. Distribution system functions are included within Engineering Division responsibilities.

#### **Key 2001 Objectives**

- 1. Complete most projects in 2001 Capital Work Plan, which is approximately one-third larger than the average Work Plan for the previous five years. Continue efforts on productivity.
- 2. Make progress on work from re-engineering in areas of plan review, system improvements, and facility management.
- 3. Successfully initiate construction on reuse and water treatment plant improvements, that are critical for the Department.

Regular & Introductory Employees (At End of Year)

	1997	1998	1999	2000	2000	2001
Section	Actual	Actual	Actual	Budget	Actual	Budget
Director of Engineering	8.0	8.0	8.0	8.0	8.0	8.0
Programs and Projects	32.0	32.0	33.0	34.0	35.0	37.0
Survey	24.0	26.0	25.0	26.0	25.0	26.0
Distribution*	37.6	39.0	40.0	40.0	38.0	40.0
Construction Management	21.0	21.0	21.0	21.0	21.0	23.0
Total	122.6	126.0	127.0	129.0	127.0	134.0

<sup>\*</sup>Twelve employees transferred to Distribution from Administration Division due to reorganization of the Administration Division February, 1997.

	1997	1998	1999	2000	2000	2001
	Actual	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 6,495	6,764	6,772	6,803	6,809	7,080
Materials	331	447	363	358	406	396
Services	2,571	3,281	4,116	9,198	5,586	6,217
Contract Payments	14,408	35,849	29,765	39,903	45,103	57,323
Equipment	44	83	51	54	57	31
Refunds	0	0	3	0	18	0
Other	153	0	3	0	0	0
Total	\$ 24,002	46,424	41,073	56,316	57,979	71,047

#### **Planning Division Summary**

#### **Activities**

The Planning Division is responsible for identifying and integrating the future water and facilities needs and resources of Denver Water and determining and protecting options to meet those needs and resources. Planning is also responsible for coordinating outside pertinent activities with local, state, and federal agencies. It accomplishes this by providing demographic projections and raw and treated water consumption forecasts. It also develops long and short-range plans for facility development. Additionally, it also determines the water supply available, plans and controls daily operation of the water supply, plans for the construction of treated water transmission distribution, pumping and storage facilities, performs environmental planning, and plays a key role in the development, protection, and management of water rights.

#### **Key 2001 Objectives**

- 1. Preserve, protect, develop and utilize Denver's water resources to adequately serve our customers.
- 2. Continue Denver Water's cooperative role in metro water planning.
- 3. Plan for the treated water distribution system expansion.
- 4. Preserve Denver Water's ability to use its water resources by successfully addressing endangered species and other environmental concerns.

#### Regular & Introductory Employees (At End of Year)

	1997	1998	1999	2000	2000	2001
Section	Actual	Actual	Actual	Budget	Actual	Budget
Director of Planning	3.9	4.0	3.0	3.5	3.0	3.5
Environmental Planning	4.4	4.4	4.4	4.6	4.4	4.6
Raw Water Supply	6.0	6.0	5.0	6.0	6.0	6.0
Water Rights	8.0	7.0	7.0	8.0	7.0	8.0
Water Resources Analysis	8.0	8.0	9.0	10.0	10.0	10.0
General Planning	4.0	4.0	5.0	5.0	5.0	5.0
Hydraulics	7.0	7.0	7.0	7.0	7.0	7.0
Total	41.3	40.4	40.4	44.1	42.4	44.1

	1997	1998	1999	2000	2000	2001
	Actual	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 2,290	2,398	2,436	2,510	2,555	2,639
Materials	32	30	36	36	37	45
Services	1,038	915	1,087	2,123	1,584	1,970
Contract Payments	0	0	0	588	519	1,017
Equipment	32	21	21	12	29	6
Other	0	0	4	0	0	0
Total	\$ 3,392	3,364	3,584	5,269	4,724	5,677

#### **Operations and Maintenance Division Summary**

#### **Activities**

The Operations and Maintenance Division is responsible for operating and maintaining the physical plant of Denver Water. It establishes operating criteria for the proper operation of all plant facilities and maintains the Denver Water system to the satisfaction of outside regulating agencies. Major functions include: monitoring and developing water quality control methods, diversion and storage of raw water supply; maintenance and operation of physical plant at various dams, reservoirs, hydro-turbines and water treatment plants; construction, maintenance and repair of transmission and distribution piping, appurtenances, and facilities; operation of the distribution system and supervision of process control; and coordination of Denver Water Safety and Security, Environmental Compliance Programs and warehousing functions.

#### **Key 2001 Objectives**

- 1. Improve reliability of Water Treatment Plants.
- 2. Increase efficiency.
- 3. Increase system reliability.

Regular & Introductory Employees (At End of Year)

	1997	1998	1999	2000	2000	2001
Section	Actual	Actual	Actual	Budget	Actual	Budget
Plant Office	5.0	6.0	5.0	5.0	5.0	5.0
Water Quality and Compliance*	28.0	28.0	28.5	31.0	30.5	31.0
Safety & Loss Control**	12.0	12.0	12.0	12.0	12.0	13.0
Source of Supply	56.0	59.0	59.0	61.0	60.0	61.0
Water Treatment	62.0	61.0	65.0	68.0	66.0	70.0
Treated Water Operations	58.0	58.0	58.0	61.0	59.0	60.0
Transmission & Distribution	157.0	161.0	157.0	166.0	162.0	166.0
Instrumentation & Control	16.0	16.0	16.0	16.0	16.0	16.0
Maintenance and Warehouse***	129.0	128.0	127.0	131.0	125.0	132.0
	523.0	529.0	527.5	551.0	535.5	554.0

<sup>\*</sup> Environmental Compliance transferred to Water Quality due to reorganization of Administration Division in February 1997, including 3 employees.

	1997	1998	1999	2000	2000	2001
	Actual	Actual	Actual	Budget	Actual	Budget
Payroll	\$ 24,278	25,120	25,410	25,680	26,247	26,973
Materials	10,261	10,356	11,016	10,375	11,805	10,320
Services	9,209	9,584	9,777	9,066	11,263	9,380
Contract Payments	21	0	60	0	0	0
Equipment	1,984	2,506	1,952	2,704	2,391	2,690
Other	0	1	10	0	(57)	0
Total	\$ 45,753	47,567	48,225	47,825	51,649	49,363

<sup>\*\*</sup>Safety and Loss Control transferred to Operations and Maintenance due to reorganization in February 1997 including 12 employees. Warehouse transferred to Operations and Maintenance (Maintenance Section) due to reorganization in February 1997, including 20 employees.

<sup>\*\*\*</sup>The Administration Division's Meter Repair employees transferred to Public Affairs in 1995. The mete repair function, including 18 employees, transferred to Maintenance due to reorganization of Administration Division in February 1997. The Warehouse function and the 18 employees also transferred to Maintenance.

#### **Divisional Reconciliation to Summary Totals**

The following table reconciles the Divisional Summary totals for each year to the total expenditures shown elsewhere in this document.

#### **Expenditure History (Thousands of Dollars)**

	1997	1998	1999	2000	2000	2001
Division Name	Actual	Actual	Actual	Budget	Actual	Budget
Manager & Staff	\$ 10,824	22,045	23,522	26,031	24,164	26,639
Public Affairs	8,595	8,876	10,090	11,053	10,267	19,752
Legal	1,413	1,786	2,531	2,201	2,578	2,354
Finance	64,002	60,858	49,295	48,403	46,956	45,838
Engineering	24,002	46,424	41,073	56,316	57,979	71,047
Planning	3,392	3,364	3,584	5,269	4,724	5,677
Operations & Maintenance.	45,753	47,567	48,225	47,825	51,649	49,363
Adjustments:						
Warehouse Purchases						
and Issues <sup>(1)</sup>	-1,098	-156	-20	-798	828	-1,154
Cash Flow <sup>(2)</sup>	-204	-134	-667	0	-1,271	0
Sick Leave Payout Budget <sup>(3)</sup>				640		550
Total Expenditures CHECK	\$ 156,679	190,630	177,633	196,940	197,874	220,066

- (1) Adjustments related to the timing of purchases and issues of warehouse stock.

  Denver Water maintains a warehousing operation that purchases materials and supplies into stock.

  These items are then issued and charged to jobs as needed. The Warehouse Purchases and Issues Adjustment is required to insure that the total of materials as issued balances to the amount of purchases made for warehouse stock.
- (2) The Cash Flow Adjustment is the difference between expenditures as booked and disbursed. Expenditures are budgeted and reported on a modified accrual basis (as booked). Total expenditures are then converted to a cash basis (disbursed) for purposes of determining year-end designated balances.
- (3) Employees with 5 years or more of service can convert a maximum of 80 hours of sick leave into additional pay once per year, providing they will have a minimum of 80 hours sick leave after conversion.

DENVER WATER KEY	Current Denver				Div Resp
PERFORMANCE MEASURES	Water	ACTUAL	ACTUAL	ACTUAL	For
	Goal	1999	1998	1997	Performance
I. Provide Customers with High Quality Water					
E=External; I=Internal A. Unfavorable quality:					
Smell-taste-# of customer					
E complaints per qtr	< 36	37	133	22	O&M
2. Clarity - # of customer					
E complaints per quarter 3. Hardness-# of customer	< 36	47	70	49	O&M
E complaints per quarter	< 30	17	18	17	O&M
B. Meet or exceed key DW standards					
I 1a. Turbidity - Foothills	< .1 NTU	0.04	0.04	0.05	O&M
I 1b. Turbidity - Marston I 1c. Turbidity - Moffat	< .1 NTU < .1 NTU	0.08 0.06	0.05 0.05	0.05 0.06	O&M O&M
I 2a. Fluoride - Foothills	.8 - 1.2mg/1	0.89	0.90	0.00	O&M
I 2b. Fluoride - Marston	.8 - 1.2mg/1	0.91	0.91	0.9	O&M
I 2c. Fluoride - Moffat	.8 - 1.2mg/1	0.85	0.85	0.83	O&M
I 3a. Chlorine Residual- Foothills	1.1 - 1.5mg/1	1.44	1.38	1.43	O&M
I 3b. Chlorine Residual- Marston	1.1 - 1.5mg/1	1.41	1.41	1.35	O&M
I 3c. Chlorine Residual- Moffat I 4a. pH - Foothills	1.1 - 1.5mg/1 7.5 - 8.0	1.41 7.8	1.32 7.8	1.33 7.7	O&M O&M
I 4b. pH - Marston	7.5 - 8.0	7.9	7.8	7.7	O&M
I 4c. pH - Moffat	7.5 - 8.0	7.8	7.8	7.4	O&M
· ·					
C. Meet or exceed mandated Federal stds					
1. Number of reportable violations	0	0	0	0	O&M
II. Provide Customers With Excellent Service					
A. Positive customer contact					
Per customer service rep contact:					
E 1. Length of time to answer phones	< 30 sec	49 Seconds	47 Seconds	64 Seconds	PUB
Length of time for problem-query     solution, requiring field ck.	< 48 hrs	42 Hours	36 Hours	48 Hours	PUB
3. Customer Satisfaction Survey	1 40 1113	42 110u13	30 110013	40 110013	I OB
E Index Level $(4.0 = Best)^{(1)}$	= or < 3.0	3.6	3.5	2.6	PUB
B. Reliable service E 1. Outages-average DW response time	< 20 mins.	24 Minutes	23 Minutes	23 Minutes	O&M
E 1. Outages-average DW response time 2. Disruptions-# of unplanned	< 20 mins.	24 Minutes	23 Millutes	23 Millutes	Oalvi
E disruptions(main breaks)	208 Average	195	166	251	O&M
E 3. Disruptions - Avg time of duration	< 4 hours	5.5 hours	6.0 Hours	6.2 Hours	O&M
<ol><li>4. # days involuntary restrictions</li></ol>					
E (any part of day=1 day)	0	0	0	0	PLN
E 5. # Pressure Complaints per month	< 30	17	23	10	PUB
C. Rates are appropriate for service					
E 1. Rates compared to metro water					
utilities	Lowest 25% of auricin	2 of 40	2 of 40	2 of 47	ALL DIVE
<ul><li>a. Inside Rates (1 = lowest Rate)</li><li>b. Outside Rates (1 = Lowest Rate)</li></ul>	Lowest 25% of survey Lowest 50% of survey	2 of 19 2 of 12	2 of 19 2 of 12	3 of 17 2 of 12	ALL DIVS ALL DIVS
b. Odiside Itales (1 – Lowest Itale)	Lowoot 00 /0 Or Survey	20112	20, 12	20112	, LE DIVO
D. System reliability - efficiency					
# days DW met minimum stream		I			
I flow required	365/yr.	365	365	365	PLN
I 2. # of days did not exceed flow thresholds NF of So Platte					
due to DW operations (excl. water					
rights diligence opr)	365/yr.	365	365	365	PLN
I 3. # of days DW did not violate min.	l ´				
pool requirements					
@Chatfield Res.(excl. those caused	005/	005	005	005	DIN
St.Eng.)	365/yr.	365	365	365	PLN
	1			<u> </u>	

	Current				
DENVER WATER KEY PERFORMANCE MEASURES	Denver Water	ACTUAL	ACTUAL	ACTUAL	Div Resp For
TENTONIMANOE INEAGONES	Goal	1999	1998	1997	Performance
II. Provide Customers With Excellent Service (con	tinued)				
E. Treatment Plant Utilization 1.Foothills(base load) % production to					
I total water treated	65%	75.5%	76.2%	70.4%	O&M & PLN
2.Marston(peak load) % production to			1		
l total water treated	15%	11.5%	6.6%	11.6%	O&M & PLN
3.Moffat(peak load) % production to  total water treated	20%	13.0%	17.2%	18.0%	O&M & PLN
Total mater meater		101070	,	10.070	
F. Transmission & Distribution					
Inside Denver & Total Service:  1. # main breaks per x miles of pipe					
I pipe per year	<1 break per 10 miles pipe/yr.	12.6	12.1	9.9	ENG,PLN,O&M
Ratio peak day to avg day delivery					
I (10yr. Rolling Avg.) I 3. % pipe replaced per year	2.5 rolling average 1.0%	2.37 0.68%	2.41 0.70%	2.51 0.48%	PLN ENG,PLN,O&M
o. 76 pipe replaced per year	1.070	0.0070	0.7070	0.4070	LIVO,I LIV,OUN
G. System Wide:					
Unaccounted for water % of total     total water delivered	5.0% (National Average =10%	5 34%	6.64%	7.05%	ENG,PLN,O&M
	-1070	1			,,.
III. Exercise responsible stewardship of assets					
A. Facilities maintained properly     1. Emergency Hrs. as % Preventative					
I Maint Hours <sup>(2)</sup>	8%	13%	4%	14%	O&M
2.% O&M Div Overtime Hrs. to Total					
I O&M Div. Hrs. E 3, % of fire hydrants in service	< 3% 99.90%	5.7% 99.2%	5.3% 99.7%	5.1% 99.5%	O&M O&M
E 3. % of fire hydrants in service	99.90%	99.2%	99.7%	99.5%	UQIVI
B. Workforce reflects community served					
1. Are we in compliance with  E/I Affirmative Action Plan?	Yes	No	No	No	ALL DIVS.
2. % of DWD job groups in which we	165	INO	NO	INO	ALL DIVS.
E/I are under represented					MGR(AA&HR)
Minorities Women	None None	25% 73%	23% 69%	25% 73%	
Women	None	7 3 70	05 70	7 3 70	
C. Conservation					
1. Reduce avg. annual demand from 877 (1978 base year)GAD to					
744 GAD by 1999 using 9-yr centered					
avg (GAD=Gal per Acct per day)					
E/I per Foothills Stipulation Goals 2. Avg. Conservation Dollars spent to Acre	<744 GAD by 1999	739.8	771.9	761	PLN & PUB
E/I feet saved	< \$5,000 per acre foot saved	('97-99)\$1584	('97-98)\$1584	Begin 1998	PUB
3. % of single-family residential	Average of 200/ htt 2000	200/	200/	Net Access	DUD
customers with Xeriscape 4. Contact and evaluate the 100	Average of 33% by 2002	28%	26%	Not Available	PUB
highest water users by 2002	100% by 2002	Begin 2002	Begin 2002	Begin 2002	
5. # accts using less than 18 gals. Per	Set when available	Not ovelleble	Not ovellable	Not overlately	PUB
sq. ft. per yr, adj for rainfall	Set when available	Not available	Not available	Not available	PUB
D. Workforce is productive/effective					
I 1.Retail Population served per employee	678	704	687	689	ALL DIVS
2.Retail Population served per core     employee(O&M div)	1,307 Average	1,379	1,357	1,380	O&M
3.% Supervisors & Managers Attending					
I 1+Training Classes	100%	68%	72%	78%	ALL DIVS
<ol> <li>% Non-Supv, Non-Mgr Attending 1or more Training Classes</li> </ol>	75%	63.00%	78.30%	58.5	ALL DIVS
5. % of supervisory employees to non-					
I supv employees	1 to 10 FTE's	1:4.5	1:4.8	1:4.6	ALL DIVS
6. # lost time days due to injury per I per year	not >75 days	127	126	127	ALL DIVS
7. At fault vehicle accidents/million	not 210 days	1.21	1.20	1.21	, LL DIVO
I miles driven	not >12	18	15	22	ALL DIVS

DENVER WATER KEY	Current Denver				Div Resp
PERFORMANCE MEASURES	Water	ACTUAL	ACTUAL	ACTUAL	For
W E :	Goal	1999	1998	1997	Performance
III. Exercise responsible stewardship of assets (co 8. % of MBE/WBE Contract Goals Met:	ontinuea) 				
E/I a1.Constr/Eng - MBE Goal		MBE:15%	MBE:12%	MBE:16%	ENG
Constr/Eng - MBE Actual		MBE:13.6	MBE: 9%	MBE:17%	MGR
a2. Constr/Eng - WBE Goal		WBE 5%	WBE 6%	WBE 5%	ENG
Constr/Eng - WBE Goal		WBE 8%	WBE 7%	WBE 5%	MGR
_					
E/I b1. Professional Services - Goal		MBE:11%	MBE:12%	MBE:10%	ALL DIVS
Professional Services - Actual		MBE:12%	MBE:11%	MBE:12%	MGR
b2. Professional Services - Goal		WBE 5%	WBE 5%	WBE 10%	ALL DIVS
Professional Services - Actual		WBE 3%	WBE 2%	WBE 3%	MGR
E/I c1. Purchasing - Goal		MBE:10%	MBE:9%	MBE:10%	O&M
Purchasing - Actual		MBE: 9%	MBE:9%	MBE: 8%	O&M
o Durchasias Osal		MDE 60/	M/DE 00/	W/DE: 400/	0014
c2. Purchasing - Goal Purchasing - Actual		WBE 6% WBE 7%	WBE 6% WBE 7%	WBE: 10% WBE: 5%	O&M O&M
9. Gross Turnover Rate,incl. Retirements	5-8%	7.3%	7.2%	7.4%	ALL DIVS
Consisting and officient					
E. Operations are efficient 1. O&M Costs(incl.S.O.S) per (000)/Gal					
I treated Water delivered	\$0.86 Average	\$1.04	\$0.89	\$0.96	ALL DIVS
2. O&M Costs(exclS.O.S) per (000)/Gal					50/6
I treated Water delivered 3. Total operating expenses per	\$0.79 Average	\$0.98	\$0.84	\$0.90	ALL DIVS
connection	\$236.58 Average	\$293.64	\$287.44	\$278	ALL DIVS
4. Salaries as % operating revenue	40% Average	41.0%	40.0%	42.0%	ALL DIVS
Water Qual Cost per (000)/gal treated     water delivered	\$0.02 current year	\$0.018	\$0.016	\$0.017	ALL DIVS
I 6. Water Quality tests performed	50,393.40 Average	57,661	53,521	52,704	O&M
7. % of water quality tests performed	-				
I to of % tests required 8. Average annual regular pay per	100%	100%	100%	Begin in1998	O&M
I employee	DW step 5 approx. equal	\$47,360	\$46,166	\$45,043	ALL DIVS
	to 50th percentile in Survey				
Survey  9. Comparable Benefits Per Annual I Survey	Approx.= to Survey Avg				ALL DIVS
a. Denver Water	Approx.= to Survey Avg	49.32%	47.15%	47.9%	ALL DIVS
b. Survey - Utilities, nationwide		43.60%	47.10%	47.10%	ALL DIVS
F. Financial Stewardship					
Optimal use of financial assets:					
E/I a) Credit rating (3)	AA	AA+	AA	AA	FIN
I b) Operating ratio: 1) 3 Year Moving Average	- or < 60%	E0 E0/	E9 00/	61 50/	FIN
1) 3 Year Moving Average 2) Annual	= or < .60%	58.5% 59.6%	58.0% 57.8%	61.5% 58.1%	FIN FIN
I c) Total Asset turnover:					
1) 3 Year Moving Average	= or >.9%	11.0%	11.0%	10.4%	FIN
2) Annual     d) Cost of Debt & Interest Coverage		10.8%	11.2%	11.1%	
(Weighted Average)	> or = 2.5x	4.1	3.9	3.3	FIN
e) Return on Rate Base-per					EIN
E/I Resolution 49 1) Goal		8.1%	8.1%	8.1%	FIN FIN
2) Actual		9.0%	7.6%	9.8%	FIN
IV. Exercise creative stewardship of assets					
A. Work force is creative					
1.% regular employees submitting					
I suggestions per year	10%	3%	3%	3%	ALL DIVS
Suggestions awarded for possible cost savings	15%	4%	4%	5%	ALL DIVS

	Current				
DENVER WATER KEY	Denver				Div Resp
PERFORMANCE MEASURES	Water	ACTUAL	ACTUAL	ACTUAL	For
	Goal	1999	1998	1997	Performance

Denver Water's performance measures are taken from its Mission Statement. Each of the four goals expressed in the Mission Statement was identified (shown in bold with roman numerals). Key measures were then developed from the perspective of external (customers, media, other than Denver Water) and internal (Denver Water managers, supervisors, employees) to measure how well the goals were being met.

#### FOOTNOTES:

- (1)Comprised of referral calls to supervisor, average hold time, mail surveys, and payment goals met
- (2)1999 higher due to break in Cond. 55; 1997 higher due to break in Cond. 94
- (3) Follows City's Credit Rating

#### NOTES:

Division Responsible:

ENG=Engineering Division

FIN=Finance Division

LGL=Legal Division

MGR(HR)=Human Resources

MGR=Manager and Staff

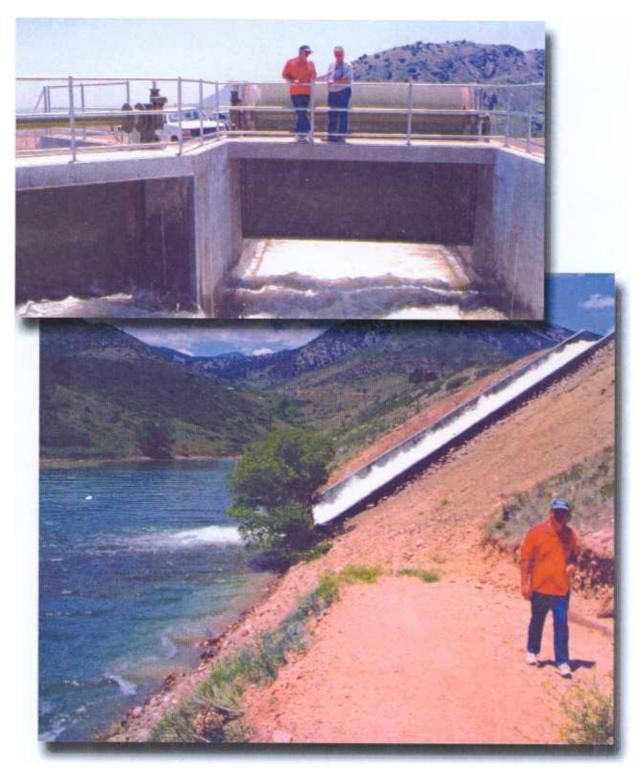
O&M=Operations and Maintenance Division

PLN=Planning Division

PUB=Public Affairs Division

ALL DIVS=All Divisions

permea99.xls FP&P



Construction inspector Jim Warden, left, and construction specialist Dave Ferebee, top photo, helped build the \$1 million deaeration waterfall at Ralston Reservoir in 2000. The structure includes a bypass and concrete chute that drops 279 feet to Ralston's surface. The chute, bottom photo, contains concrete "teeth" that agitate supersaturated air bubbles out of the water. The excess air in Ralston's water had reduced efficiency of Moffat Treatment Plant by up to 25 million gallons a day.

Debt Policy The Board's guidelines for the use of debt were adopted on December 19, 1995. In the guidelines, the Board reaffirmed its long-standing policy of using debt financing for system expansion and improvements and prohibiting its use for payment of operating and maintenance expenses. The Board also reaffirmed its long-standing current refunding program. The refunding program has enabled Denver Water to obtain a lower average cost of debt by making it possible to borrow at a shorter average maturity. Also, because Denver Water's facilities generally remain useful beyond the original maturity of debt issued to construct the facility, the refunding program has enabled Denver Water to better match loans used to construct facilities to the lives of the facilities.

Closer matching means that the cost of each facility is shared by all customers who will use the facility - both present and future water customers. In addition, because one effect of the refunding program is to increase the funds available for current year capital requirements, the refunding program has also had the effect of reducing current year revenue requirements for capital projects. This has helped Denver Water avoid erratic fluctuations in rates and fees.

Although Denver Water's general obligation bond rating is strongly influenced by the ratings assigned to the City and County of Denver, it is the goal of Denver Water to be able to obtain an investment grade stand-alone ratings should it desire to do so. To meet this goal, Denver Water uses the following criteria to evaluate the appropriateness of increasing debt or capital lease obligations and to evaluate both the adequacy of rate proposals and the structure of proposed borrowings or lease arrangements. For the purposes of computing the various ratios, obligations under capital leases are treated as debt.

- A. The Debt Ratio should not exceed 40%.
- B. Current Debt Service Coverage excluding System Development Charges should be equal to or greater than 1.1x.
- C. Projected Debt Service Coverage with System Development Charges included in revenue at the historic minimum annual amount of \$6.0 million should be equal to or greater than 1.5x.
- D. Projected Interest Coverage excluding System Development Charges should be equal to or greater than 2.5x.
- E. The year-end balance in the Water Works Fund, net of Principal and Interest Requirements for the next 12 months should be equal to or greater than \$5 million.

Calculations showing the historical and projected level of performance against the guidelines are shown on page 103.

Debt Section 4.28 of the Charter of the City and County of Denver authorizes the Board of Water Commissioners to issue revenue bonds and general obligation bonds. The Board may irrevocably commit to pay principal and interest on any general obligation bonds from the revenues of the water department. The Board has made such a commitment for all bonds it has issued.

Issuance of bonds must be approved by the voters of Denver, unless the purpose of the bond is to refund a previously issued bond and the maturity does not exceed 50 years from the first use of the facility financed by the debt. The Board currently has in effect a program of refunding a portion of the debt that matures each year. Additional amounts may also be refunded when regulations permit and market conditions are favorable.

Water bonds are excluded from the debt limitations of the City and County of Denver.

At the end of 2000, the Board had outstanding General Obligation Debt of \$211.7 million. A schedule of General Obligation debt service appears below. Scheduled annual debt service for 2001 is \$23.1 million and for 2002 is \$21.8 million. The refunding program is expected to both reduce actual cash outlays from the scheduled amount and to smooth the volatility of future cash expenditures for debt service.

#### Schedule 1: Outstanding Debt As of December 31, 2000

#### **General Obligation Water Bonds**

<u>Series</u>	Original Net Effective Interest Rate	Final <u>Maturity</u>	Original <u>Amount</u>	_	Outstanding
1992	5.98%	2008	16,060,000	\$	16,060,000
1993, Mar.	5.29%	2008	59,600,000		49,830,000
1993, Sept.	5.17%	2009	15,600,000		15,600,000
1994	5.09%	2010	131,835,000		57,700,000
1995	5.08%	2010	12,825,000		11,825,000
1996	5.24%	2011	16,975,000		13,970,000
1997	4.93%	2012	19,530,000		19,530,000
1999	5.67%	2029	14,530,000		14,530,000
2000	5.06%	2015	12,700,000		12,700,000
То	tal, GO Debt			\$	<u>211,745,000</u>

## Schedule 2: Budgeted Debt Service (Thousands of Dollars)

General	Obliga	tion	Bonds
	<b>-</b>		

· ·		<u>Principal</u>		<u>Interest</u>	<u>Total</u>
2001	\$	12,000	\$	11,052	\$ 23,052
2002		11,390		10,450	21,840
2003		11,265		9,895	21,160
2004		13,530		9,337	22,867
2005		22,940		8,653	31,593
2006 and thereafter	<b>c</b>	140,620	<b>c</b>	<u>40,634</u>	181,254
Total	\$	211,745	\$	90,021	\$301,766

# Leases The Board also uses capital leases to finance facilities and equipment. A portion of the Board's capital leases have been securitized or certificated using a Certificate of Participation (COP) structure. A COP represents the right to receive a defined amount of rental revenue from a specified lease arrangement. Legally each year, the Board decides whether to allocate funds for the lease payments. The annual nature of the lease obligation means that credit rating agencies and certificate holders must evaluate both the importance of the leased facility to the Board's operations and the credit history of the Board. For this reason, the Board will generally use the COP structure to finance only property and equipment that is essential to Board operations. The three projects that were financed through COPs are the Moffat Treatment Plant improvements; the 64th Avenue

Pump Station and the Marston Pretreatment Facility.

A non-certificated capital lease agreement was also used to finance the future acquisition of 40% of the storage capacity and water rights at Wolford Mountain Reservoir. That lease, which began in 1987, extends until 2020.

On December 31, 2000, the Board's obligations under capital leases totaled \$80.5 million. Required payments under capital leases are \$8.5 million per year for 2001 and 2002.

Schedule 3: Capital Lease 0	Obligations
As of December 31, 2	2000

Certificates Of Participation	Original Net Effective Interest Rate	Final <u>Maturity</u>	Original <u>Amount</u>	Unpaid Balance
1991 1998	6.70% 4.31%	2011 2011	58,930,000 34,885,000	\$ 19,025,000 29,220,000
Sub-To	otal Certificated			\$ 48,245,000
Non-Certificated Lo	<u>eases</u>			
Wolford Mountain Lease	6.75%	2020	43,072,924	\$ 32,265,431
Total Capital Leases				\$ <u>80,510,431</u>

Schedule 4: Budgeted Obligations under Capital Lease
(Thousands of Dollars)

(Thousands of Dollars)									
Certificates of Participation		<u>Principal</u>		Interest		<u>Total</u>			
2001 2002 2003 2004 2005 2006 and thereafter Total	\$	3,005 3,145 3,295 3,455 3,635 31,710 48,245	\$	2,502 2,349 2,198 2,027 1,846 7,061 17,983	\$ \$	5,507 5,494 5,493 5,482 5,481 38,771 66,228			
Non-Certificated Capital Leases		<u>Principal</u>		Interest		<u>Total</u>			
2001 2002 2003 2004 2005 2006 and thereafter Total	\$	836 893 955 1,020 1,090 <u>27,471</u> 32,265	\$	2,164 2,107 2,045 1,980 1,910 16,029 26,235	\$ \$	3,000 3,000 3,000 3,000 3,000 <u>43,500</u> 58,500			

# Calculation of Ratios\* Denver Water Debt Guidelines (Thousands of Dollars)

Debt Ratio	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	2001 <u>Budget</u>			
Total GO Debt& Capital Leases Divided by: Sum of Net Fixed Assets plus	330,949	302,617	296,941	291,165	284,905			
Net Working Capital  Debt Ratio  Target: <=40%	1,087,479 30.4%	1,116,960 27.1%	1,213,067 24.5%	1,275,534 22.8%	1,355,067 21.0%			
Current Debt Service Coverage	0.4.400				<b>-</b> 0			
Net Revenues Divided by: Scheduled Principal and Interes	61,463 est	63,072	62,575	69,730	74,152			
payments-current yr DSC ex. SDC Target: >=1.1x	44,294 1.4	39,158 1.6	36,670 1.7	34,778 2.0	31,559 2.3			
Projected Net Debt Service Coverage, w	vith System	Developm	ent Charge	es				
Net Revenues	61,463	63,072	62,575	69,730	74,152			
Plus: SDC @ \$6 million historic minimum Revenues and SDCs	<u>6,000</u> 67,463	<u>6,000</u> 69,072	<u>6,000</u> 68,575	<u>6,000</u> 75,730	<u>6,000</u> 80,152			
Divided by: Principal and Interest Require								
next 12 months  Less: Current yr refunding proceeds, gros	40,166	36,514 0	33,527 _14,530	31,559 12,700	30,334 11,215			
Net Debt Service	20,626	36,514	18,997	18,559	19,119			
Net DSC w/SDC Target: >=1.5 x	3.3	1.9	3.6	4.0	4.2			
Projected Interest Coverage								
Net Revenues Divided by Interest Requirements	61,463	63,072	62,575	69,730	74,152			
next 12 months	18,526	16,277	15,125	15,718	14,906			
Interest Coverage Target: >=2.5 x	3.3	3.9	4.1	4.4	5.0			
Designated Balances for System Operations, Capital and Land Sale Account								
Net of Projected Debt Service								
Year-end Balance Less: Principal and Interest Require	114,463	97,494	152,862	151,863	139,750			
next 12 months	40,166	<u>36,514</u>	33,527	<u>31,559</u>	30,334			
Net Balance	74,597	60,980	119,335	120,304	109,416			
Target: >=5,000								

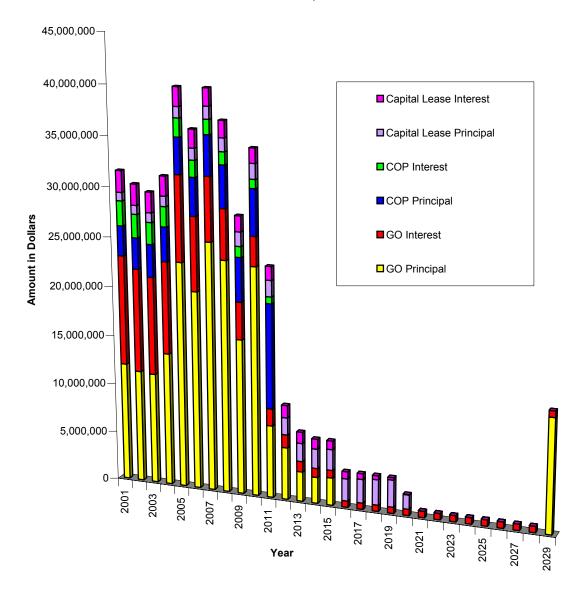
<sup>\*</sup>For the purpose of ratio computations, obligations under capital lease are treated as debt.

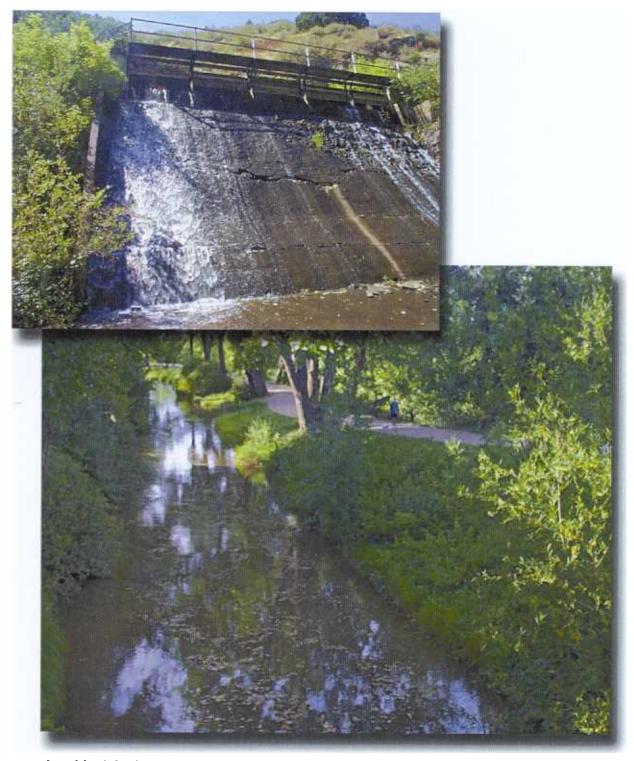
## **Denver Water**

# Scheduled Debt Service and

### **Obligations Under Capital Leases**

as of December 31, 2000





The old High Line Canal continues to be one of Denver Water's most fascinating facilities. In the top photo, water tumbles down a sand wash just downstream of the canal's headgate and tunnel in Waterton Canyon. In the photo below, the stretch through Littleton is maintained by South Suburban Parks and Recreation. The High Line's recreational trail is 66 miles long.

#### **Designated Balances for System Operations, and Land Sale Account Summary**

#### Total Designated Balances for System Operations, and Land Sale Account

2001 began with an actual Designated Balance for System Operations and Land Sale Account of \$165,594,000. The budget projects this amount to be increased during 2001 by receipts of \$194,222,000 and decreased by expenditures of \$220,066,000, resulting in a total 2001 Ending Balance of \$139,750,000.

The Designated Balances for system operations and capital for each year reflect the following factors:

- 1) Three months of the next year's operation and maintenance less the current year's claims, workers compensation medical and disability payments.
- 2) 50% of the next year's non-expansion capital (normal replacements and improvements).
- 3) One year of debt service.
- 4) Self Insurance continuing at 5% of the next year's operating receipts less claims, workers compensation medical and disability payments, plus 2001 provision for Foothills Solids Disposal Site Closure of \$364,000.
- 5) Future Capital consisting of the difference between the total designated balances available for system operation and the total of amounts for operation and maintenance, non-expansion capital, debt service and self insurance contingencies, amounts including provisions for solids disposal site closure costs.

The Land Sales Account consists of net land sales for specific projects. It is comprised of the proceeds from surplus land sales and interest income less related expenses plus expenditures for identified projects.

## Designated Balances For System Operations and Land Sales Account 1997 - 2001

(Thousands of dollars)

	1997 Actual		1998 Actual		1999 Actual	. <u>-</u>	2000 Budget	=	2000 Actual	_	2001 Budget
Designated Balance for System Operations and Capital:											
·	\$ 17,763	\$	18,043	\$	19,299	\$	20,700	\$	20,235	\$	23,526
Non-expansion Capital (50% of normal replacements and improvements, next year)	9,529	)	10,273		11,340		12,791		13,199		11,575
Debt Service Principal, Interest and Related (1 Year, next year)	48,247		36,240		34,222		32,891		31,629		43,763
Self Insurance (5% of Operating Receipts, next year plus year 2000 provisions for solids disposal site closures at Foothills and Ralston are \$1.2 million and \$1.0 million, respectively.)	6,364 r,		6,308		7,472		6,887		6,973		7,550
Contractural Obligations*	22,900	(1)	35,419	(2)	0		0		0		0
Future Capital:											
Supply	18,968	;	10,365		33,992		34,558		64,080		23,276
Water Treatment	3,794		6,973		33,992		20,735		21,945		18,155
Transmission & Distribution	2,528	<u>.</u> .	1,508		4,340		2,303	_	1,756	-	5,120
Total Designated Balance for System	Total Designated Balance for System										
_	\$ 130,093	\$_	125,129	_ \$_	144,657	\$	130,865	\$_	159,817	\$_	132,965
Net Land Sales Account	5,653	<u>.</u>	5,415		5,194	- <del>-</del>	7,636	_	5,777	_	6,785
Total Designated Balance and			400 =	•		•	400 50	•		•	400 ==0
Land Sales Account	\$ <u>135,746</u>	\$	130,544	<b>\$</b> _	149,851	\$_	138,501	\$_	165,594	\$_	139,750

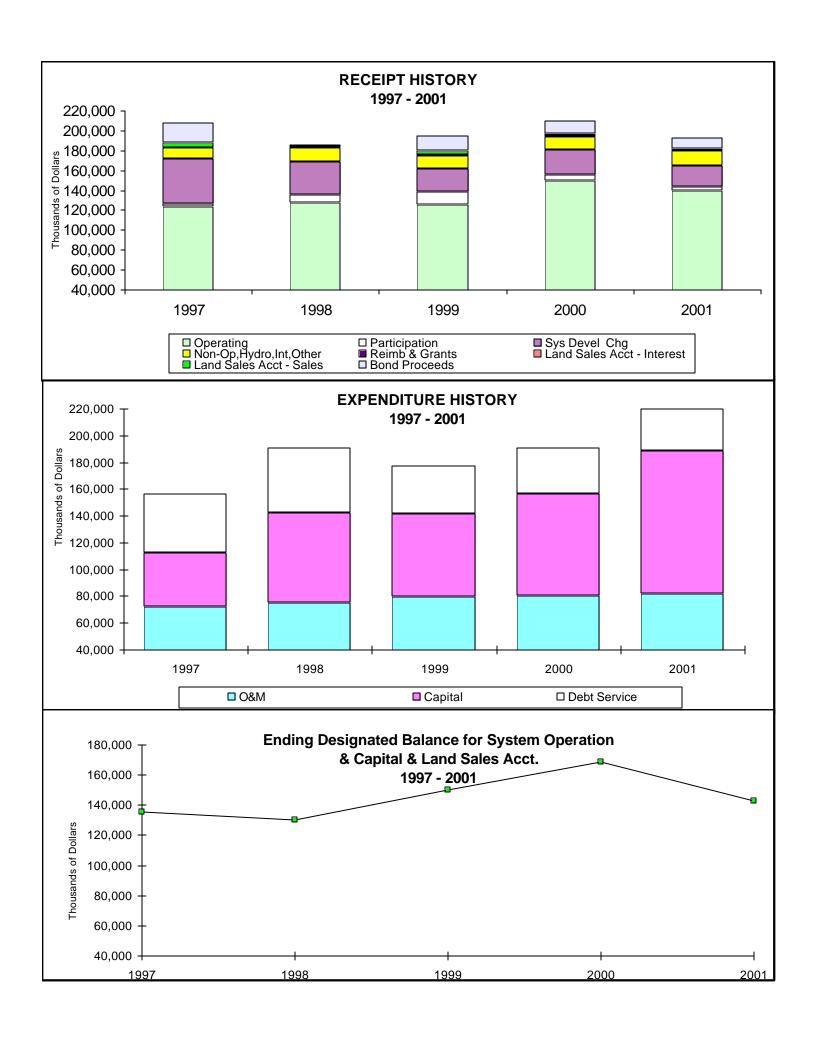
#### FOOTNOTES:

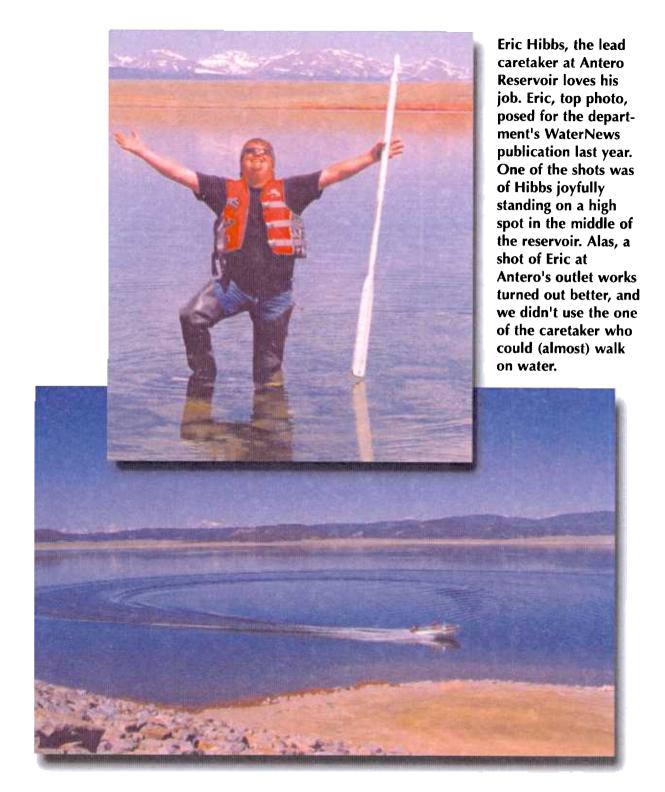
- \* Contractual Obligations consists of :
- (1) 1997 payment of \$22.9 million for Systems Development Charges by South Adams County Water and Sanitation District for delivery of 4,000 acre-feet of potable water under the terms of the Memorandum of Understanding dated December 19, 1997.
- (2) 1998 payment of \$12.5 million for Systems Development Charges by Public Service Co. of Colorado for delivery of 5,200 acre-feet of reuse water under terms of a Reuse Agreement dated December 16, 1997.

#### Comparison of Receipts and Expenditures 1997 - 2001 (Thousands of Dollars)

(Thousands	of Do	llars)
------------	-------	--------

	_	1997 Actual	_	1998 Actual		1999 Actual	_	2000 Budget	_	2000 Actual		2001 Budget
Beg. Designated Bal for System	•	04 707	•	125 746	¢	120 E44	¢	140.051	¢	140.051	•	165 504
Oper., Capital & Land Sales Acct. Receipts:	\$	84,727	\$	135,746	\$	130,544	\$	149,851	\$	149,851	\$	165,594
Operating	\$	123,005	\$	127,281	\$	126,160	\$	133,298	\$	151,490	\$	139,465
Non-Operating	•	2,796	•	3,510	۳	3,294	•	2,917	•	3,315	۳	3,200
Hydropower		1,536		1,510		1,631		1,878		2,108		2,030
System Development Charges		45,092		33,187		24,328		19,100		25,620		21,300
Participation		3,731		8,413		13,171		3,741		6,392		3,915
Reimbursements		131		168		371		387		791		1,637
Interest on Investments		4,255		6,877		6,213		6,535		8,436		7,653
Land Sales Account - Interest		193		340		363		334		325		363
Land Sales Account - Sales		4,808		1,956		4,691		2,700		1,376		1,500
Other		2,507		2,186		2,246		2,000		1,087		2,000
Subtotal Receipts	\$	188,054	\$	185,428	\$	182,468	\$	172,890	\$	200,940	\$	183,063
Bond Proceeds	_	19,644		0	· _	14,472		12,700		12,677	_	11,159
Total Receipts	\$_	207,698	\$_	185,428	\$_	196,940	\$	185,590	\$_	213,617	\$_	194,222
Expenditures:												
Operation & Maintenance Programs:												
Raw Water	\$	11,506	\$	12,288	\$	12,184	\$	10,211	\$	11,949	\$	11,386
Reuse	•	12	•	6	•	4	•	17	•	7	•	0
Water Treatment		15,654		15,741		16,380		18,281		17,198		17,952
Delivery		36,162		37,450		40,184		41,234		40,291		40,727
General Plant		8,732		9,620		10,729		10,553		11,391		11,994
Total Operation &	-		-		_		-		-		-	
Maintenance Expenditures	\$_	72,066	\$_	75,105	\$_	79,481	\$	80,296	\$	80,836	\$_	82,059
Capital Programs:												
Raw Water	\$	11,739	\$	19,557	\$	17,040	\$	22,123	\$	31,173	\$	15,391
Reuse		393		999		620		6,172		1,987		19,801
Water Treatment		4,716		14,799		14,879		15,699		16,078		26,197
Delivery		16,220		21,637		20,586		24,435		25,860		31,359
General Plant		7,640		10,286		8,787		13,761		7,899		13,630
Major Capital Project Timing		0		0		0		0		0		0
Total Capital Expenditures	\$	40,708	\$	67,278	\$	61,912	\$	82,190	\$	82,997	\$	106,378
Debt Service and Related	\$_	43,905	\$_	48,247	\$_	36,240	\$	34,454	\$	34,041	\$_	31,629
Total Expenditures End Designated Bal for System	\$_	156,679	\$	190,630	\$_	177,633	\$	196,940	\$_	197,874	\$_	220,066
Oper., Capital & Land Sales Acct.	\$	135,746	\$	130,544	\$	149,851	\$	138,501	\$	165,594	\$	139,750
Opon, Oapital & Land Gales Acct.	Ψ_	100,740	Ψ_	100,044	Ψ_	140,001	Ψ	100,001	Ψ_	100,004	Ψ_	100,700
Less Cumulative Amounts												
for the Land Sales Account:												
Net Proceeds from Sales	\$	5,845	\$	7,762	\$	12,304	\$	15,004	\$	13,376	\$	14,875
Interest Income		308		648		1,011		1,345		1,336		1,699
Expenditures	_	500	_	2,995		8,121		8,713	_	8,935	_	9,789
Total Land Sales Account	\$	5,653	\$	5,415	\$	5,194	\$	7,636	\$	5,777	\$	6,785
Designated Balance Available for System Operations and Capital	\$	130,093	\$	125,129	<b>\$</b> _	144,657	\$	130,865	\$	159,817	\$ _	132,965





**Acronyms AF MBE** Acre Foot Minority Business Enterprise **AMWA IRP** Association of Metropolitan Water Agencies Integrated Resource Planning **AWWA MGD** American Water Works Association Millions of Gallons per Day COP **NWRS** Certificate of Participation **National Water Resource Association CWA RCRA** Clean Water Act Resource Conservation and Recovery Act DIA **WBE Denver International Airport** Women's Business Enterprise DW **WUWC Denver Water** Western Urban Water Coalition

**EPA** 

**GAD** 

**GIS** 

**G O Bonds** 

**Environmental Protection Agency** 

Gallons per Account per Day

Geographic Information System

**General Obligation Bonds** 

**Glossary of Terms** 

#### **Annual Yield**

Maximum basic demand the water supply could supply throughout a period of historical or synthesized hydrological conditions.

#### **Bonds**

Debt instruments issued by a state or local government that are secured by the full faith and credit of the entity. According to the Charter, the Board may issue general obligation and revenue bonds by a vote of the citizens of the City and County of Denver.

#### **Booked**

Accrual method of accounting in which expenses are recognized when the liability is incurred.

#### **Budget**

A financial plan for a specified period of time (fiscal year) that assigns resources to each activity in sufficient amounts so as to reasonably expect accomplishment of the objectives in the most cost effective manner.

#### **Capital Work Plan**

A category of Master Plan items that are considered to be of a capital nature. Includes projects having a depreciation life of over one year and tends to benefit future periods, or has the effect of increasing the capacity, efficiency span of life or economy of an existing fixed asset. Example: the construction of a new conduit.

#### **Capital Leases**

A lease having essentially the same economic consequences as if the lessee had secured a loan and purchased the leased asset.

#### **Casual Employee**

An employee who works on an intermittent basis as a summer employee or during other brief periods.

#### **Certificates of Participation**

Evidence of assignment of proportionate interests in rights to receive certain revenues pursuant to a Master Lease Purchase Agreement between the Board of Water Commissioners, as lessee, and Denver Capital Leasing Corporation, as lessor.

#### **Chart of Accounts**

Listing of account numbers and their descriptions.

#### **Contract Payments**

Consists of contract payments for construction, materials purchased for contractor installation, acquisition of land and land rights and water rights.

#### **Corporate Culture**

Values that set a pattern for a company's activities, opinions and actions.

#### **Cost Control Center**

A term used to denote a responsibility center. It is an organizational unit that has been placed in charge of accomplishing certain specified tasks. Example: Water Control Section.

#### **Customer Taps**

A physical connection to a distribution main that, together with appropriate license affects water service to a licensed premise.

#### **Debt Policy**

An on-going policy of what sources to use to invest in new infrastructure in order to assure enough water for good service in the future.

#### **Debt Service**

Consists of principal and interest on long-term debt.

#### **Demand Side Management**

Term used when rebates are given when a facility can reduce power consumption.

#### **Designated Balances**

The beginning and ending balances of the Water Works Fund are classified or designated into two categories for presentation purposes; the portion related to the Land Sales Account and the remainder that is available for System Operations and Capital purposes.

#### **Direct Materials**

Includes materials and supplies purchased for direct use and fuel and oil for vehicles and equipment (non-stores issues only).

#### **Disbursements**

Money paid out for expenses, liabilities or assets.

#### **Discretionary Employee**

The charter of the City and County of Denver allows the Board to establish a classification of employees who have "executive discretion," who shall number no more than 2% of all persons employed, and shall serve solely at the pleasure of the Board.

#### **Diversity Training**

Objective of providing skills for managing and working with people of all races, genders and cultures.

#### Division

Largest organizational unit reporting to the Manager.

#### **Employee Benefits**

Employee Benefits are expenditures paid by Denver Water for Worker's Compensation, Social Security, Retirement, Employee Assistance Program, Health and other insurances. It does not include employee withholdings or unemployment insurance.

#### **Endangered Species Act**

The federal law that sets forth how the United States will protect and recover animal and plant species whose populations are in dangerous decline or close to extinction. The law protects not only threatened and endangered species but also the habitat upon which species depend.

#### **Enterprise Fund**

A type of propriety fund or a governmental unit that carries on activities in a manner similar to a private business.

#### **Executive Discretion**

The responsibility, under the direction of the Manager, to implement Board Personnel Policies and programs and to comply with their meaning and spirit.

#### **Federal Statutes**

Statutes enacted by Congress relating to matters within authority delegated to federal government by the U.S. Constitution.

#### **Fund**

An accounting entity with a set of self-balancing accounts that is used to account for financial transactions for specific activities of government functions.

#### **General Equipment**

Includes expenditures for the purchase of the following: computer equipment, office furniture and equipment, transportation equipment, storehouse equipment, construction and maintenance tools and equipment, chemical laboratory equipment, power operated equipment, communication equipment, garage and shops equipment and miscellaneous equipment.

#### **General Obligation Bonds (GO Bonds)**

Borrowing to provide for the acquisitions and construction of major capital facilities. Direct obligations for which full faith and credit is pledged.

#### Goals

Overall end toward which effort is directed.

#### **Governmental Accounting Standards Board (GASB)**

Establishes the generally accepted accounting principles for state and local governmental units.

#### **Historical Timing Adjustment**

Estimate of budget variances primarily due to changes in capital construction schedules and the timing of obtaining permits and acquiring rights-of-way.

#### Hydropower

Hydroelectric power of/or relating to production of electricity by water power.

#### **Income Statement**

A financial statement showing revenues earned, the expenses incurred in earning the revenues and the resulting net income or net loss.

#### Infill

Undeveloped areas within the combined service area that Denver Water would be expected to serve in the future.

#### **Integrated Resource Planning (IRP)**

A method for looking ahead using environmental, engineering, social, financial and economic considerations; includes using the same criteria to evaluate both supply and demand options while involving customers and other stakeholders in the process.

#### **Introductory Employee**

An employee who is newly appointed to a position and is serving an introductory period, generally of six month's duration.

#### **Land Sales Account**

Proceeds from land sales, less Board specified water system expenditures plus interest earned on the balance of the account.

#### **Lease Payments**

Period payments of principal and interest pertaining to a lease.

#### **Long-Term Debt**

Debt with a maturity of more than one year from date reported.

#### **Master Plan**

Expenditures identified by projects and activities that are necessary to accomplish the Department's overall operating goals and objectives. The Master Plan, or Program Budget, is divided into a Capital Work Plan and an O&M Work Plan.

#### Master Plan Item

A specific activity or project that is identified in the Master Plan.

#### **Modified Accrual Basis**

Accounting method in which expenditures are reported and budgeted "as booked." The difference between expenditures "as booked" and disbursed is adjusted to determine the ending cash and investment balance amounts.

#### **Municipal Water Utilities**

Public entities whose responsibility is to deliver water to the customers.

#### Non-Operating Revenue

Revenue received from payments for services such as main inspections, installation of taps, calculating and mailing of sewer bills and other such services.

#### Non-Potable

Water not suitable for drinking. (See also Potable, Reuse.)

#### **Objectives**

Something toward which effort is directed - an aim, goal or end of action.

#### **Operating Reserves and Restricted Funds**

The amount of cash and invested funds available at any point in time. The balance is the Water Works Fund as defined in this glossary.

#### **Operating Revenue**

Revenue obtained from the sale of water.

#### Operation and Maintenance (O&M) Work Plan

A category of Master Plan items not capital in nature, that are normally ongoing activities and pertain to the general operations of Denver Water.

#### Other

Consists of such items as payroll deductions, sales tax, insurance claims, cash over and short, and budget adjustments.

#### **Other Services**

Consists of such items as training, employee expenses, rents and leases, ditch assessments, convention and conference expenses, subscriptions, maintenance and repair agreements and memberships.

#### **Overtime Pay**

Includes all overtime related payroll such as straight overtime, time and one-half overtime, all overtime travel compensation, swing and graveyard shift overtime differentials.

#### **Participation Agreement**

An agreement in which a distributor or developer pays for the cost of the distribution facilities such as conduits, treated water reservoirs or pump stations required to provide service within that district from the nearest existing available source.

#### **Potable**

Water that does not contain pollution, contamination, objectionable minerals or infective agents and is considered safe for domestic consumption; drinkable. (See also Nonpotable, Reuse.)

#### **Professional Services**

Consists of consultant payments for such activities as facility design, legal work and auditors.

#### **Program**

An organized group of activities and the resources to carry them out, aimed at achieving related goals.

#### **Program Budget**

A method of budgeting in which the focus is on the project and activities that are required to accomplish Denver Water's mission, goals and objectives. It provides for consideration of alternative means to accomplish these criteria. It also provides a control device for higher level management and cuts across organizational lines. Resources are allocated along program lines and across organizational lines.

#### **Program Element**

Series of smaller categories of activities contained in the program such as raw water, water treatment, etc.

#### **Project Employee**

A contract worker assigned to a project of more than one year's duration and receiving a limited benefits package.

#### Refunds

Includes System Development Charge Refunds and Customer Refunds.

#### **Regular Employee**

An employee who has satisfactorily completed an introductory period and has been approved by the Board to receive the rights and privileges of a tenured employee.

#### **Regular Pay**

Includes all straight-time salaries and wages earned, leaves, tuition refunds, suggestion awards, swing and graveyard shift payrolls, and safety equipment allowances. Regular pay consists of all payroll items except for overtime pay.

#### Reuse

To use again; recycle; to intercept, either directly or by exchange, water that would otherwise return to the stream system, for subsequent beneficial use. (See also Potable, Nonpotable.)

#### Safe Drinking Water Act (SDWA)

Federal legislation passed in 1974 that regulates the treatment of water for human consumption and requires testing for and elimination of contaminants that might be present in the water.

#### **Stores Issues**

Includes materials and supplies issued from inventory and fuel and oil for vehicles and equipment (stores issues only).

#### Strategic Plan

Process that is a practical method used by organizations identifying goals and resources that are important to the long-term well being of its future.

#### **Streamline Pay**

Automatic deduction of bills from customers' checking accounts.

#### **System Development Charges**

A one-time connection charge that provides a means for financing a portion of the source of supply, raw water transmission facilities, treatment plants and backbone treated water transmission facilities required to provide service to a new customer. Sometimes called a tap fee.

#### **Temporary Employee**

An employee hired as an interim replacement or temporary supplement of the work force. Assignments in this category can be of limited duration or indefinite duration, but generally do not exceed one year.

#### Type of Expenditure

A classification of resources or commodities that will be budgeted and charged to projects and activities by Cost Control Centers.

#### **Utilities & Pumping**

Consists of gas, electric and telephone, electricity wheeling charges, replacement power purchased and power purchased for pumping.

#### Water Conservation

Obtaining the benefits of water more efficiently, resulting in reduced demand for water. Sometimes called "end-use efficiency" or "demand management."

#### **Water Revenues**

Revenues generated through billing process from the sale of water.

#### **Waterworks Fund**

A fund into which are placed all revenues received for the operation of the water works system and plant together with all monies coming into said fund from other sources. Denver Water is allowed by the City Charter to have only one fund, the Water Works Fund, for all of its receipts and expenditures. The balance of the Water Works Fund is referred to in this budget document as the Designated Balances, Capital and Land Sales Account.

#### Fiscal Planning & Performance Staff, Divisional Budget Coordinators and Others

#### **Fiscal Planning & Performance Staff:**

Ron Duncan
Antoinette Chavez
Christy Marquez
Marie Nieto
Marilyn Stwalley
Carey Thompson

#### **Fiscal Planning & Performance Information Services Support:**

Dean Flanders – Program Budget System
Pam Peschel – Labor Budget System

#### **Divisional Budget Coordinators:**

**Edith Carlson** Manager and Staff Alice M. Montez Human Resources Public Affairs/Finance Sue Zimmerman Pat Williams Legal Marilyn Hampton Information Technology Gary Aberle Engineering Tom Clark Planning Charlene Gregg Operations and Maintenance

#### **Graphics and Reproduction Staff:**

Bob Fletcher\* Fran Lukachy Dorothy Keeble Samuel Smith

#### **Editorial Assistance:**

Jane Earle – Community Affairs Richard H. Johnson – Community Affairs\*

\* Pictures and Captions for the cover and tabs provided by Bob Fletcher and Richard Johnson.